49th Annual Report

of the

New Jersey Department of Agriculture

July 1, 1963 – June 30, 1964

Trenton, New Jersey **June 30, 1964**

FOREWORD

A complete description of the activities of each of the divisions of the New Jersey Department of Agriculture for the 12 months ending June 30, 1964, is contained in the report that follows. A much less detailed report, covering the highlights of the year's work, was previously issued and has received wide distribution. A limited edition of the full report is made available to meet the needs of those readers who, because of their special need, close association with the Department, or for other reasons, require a complete account of the Department's various programs.

PHILLIP ALAMPI
Secretary of Agriculture

NEW JERSEY
STATE BOARD OF AGRICULTURE

REGINALD V. PAGE,[1] Toms River, President

W. STUART HARTUNG,[1] Roxburg, Vice-President

ROY R. BLAIR, Nutley

THOMAS S. DeCOU, Cherry Hill

ALBERT H. FORSYTHE, Mount Holly

JOSEPH MACCARONE, Swedesboro

CHARLES PRATSCHLER, Montague

JAMES P. VREELAND, JR., Towaco

NEW JERSEY
DEPARTMENT OF AGRICULTURE

PHILLIP ALAMPI, Secretary of Agriculture

WILLIAM C. LYNN, Assistant Secretary of Agriculture

WILLIAM E. KENNY, Director, Division of Administration

DR. E. L. BROWER, Director, Division of Animal Industry

FRED W. JACKSON, Director, Division of Information

FRANCIS A. RAYMALEY, Director, Division of Markets

FRANK A. SORACI, Director, Division of Plant Industry

FLOYD R. HOFFMAN, Director, Office of Milk Industry

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[1]Messrs. Page and Hartung retire from the Board on June 30, 1964. The new members will be Elia Clemenson of Estell Manor and Charles V. N. Davis of New Centre.

STATE BOARD OF AGRICULTURE

The New Jersey State Board of Agriculture, through the Secretary of Agriculture, assigns and supervises all Department of Agriculture functions. The Board is comprised of eight farmers selected by delegates to the State Agricultural Convention. Each member serves a four-year term without compensation.

During the year 1963-64, the Board held 12 meetings. Official business concerned personnel appointments, promotions, and retirements; regulations which complement agricultural statutes; and the promotion of New Jersey agriculture. Among other actions, the Board:

Adopted the regulation Marking Open and Closed Potato Packages. This regulation complements Chapter 116, P.L. 1963. The statute requires that packages containing potatoes be properly marked to indicate the grade classification.

Amended three egg regulations to expand the marketing of New Jersey produced eggs sold under the New Jersey Seal of Quality or New Jersey Official Grades.

Amended the regulation Controlled Atmosphere Storage to establish a method for identifying apples emanating from such storages.

Amended regulations on Brucellosis Testing and the Indemnification of Brucellosis Reactors to conform with United States Department of Agriculture recommendations.

Revised license fee rates for dealers packaging eggs under official supervision.

Sponsored the 93rd annual Farmers Week.

Co-sponsored the sixth annual New Jersey Marketing Institute.

Co-sponsored the annual Farm Show.

Increased the bonding requirement for South Jersey milk dealers under Federal Milk Market Order No. 4 to cover payments due milk producers more adequately.

Continued control and eradication efforts against the European chafer and the gypsy moth.

Awarded citations for distinguished service to New Jersey Agriculture to:

Harry Deverman, a Clifton nurseryman
William A. Crane, a West Caldwell dairyman
Amos Kirby, a Mullica Hill agricultural publicist
Michael J. Klein, a Hope florist

Approved a Department of Agriculture budget request of $1,927,989 for the fiscal year 1964-65.

COUNTY BOARDS OF AGRICULTURE

For a good many years -- in fact for more than three-quarters of a century -- county boards of agriculture have been an integral part of organized agriculture in New Jersey. The New Jersey Legislature authorized the State Board of Agriculture to encourage the formation of such county units. Being close to the areas of production, they would be able to transmit to the Board a record of accomplishments in their respective areas as well as to relate the problems which confronted the farmers in the different counties.

When the State Board of Agriculture was reorganized in 1916, authors of the legislation evidently recognized the importance of county boards of agriculture by making them predominant in the State Agricultural Convention. Each county board was allotted two delegates to the Convention, held annually for the purpose of selecting two members of the State Board and transacting such other business as may properly come before it.

In 1916, two-thirds of the official delegates to the Convention represented county boards of agriculture. In the nearly half a century since that time, other organizations have been admitted with either one or two delegates so that today the total number of delegates is 84. Even so, 42 members, exactly half of the delegate body, still represent county boards of agriculture.

Of recent years, liaison has been developed between the State Board and county boards of agriculture through visitations at intervals to the monthly executive committee meetings. Members of the State Board of Agriculture and key personnel of the Department have attended.

To further this excellent relationship, consideration is being given to developing a Department of Agriculture committee within the executive committee of each county board, and continuing the regularly scheduled visitations of the type mentioned above. These efforts should provide additional opportunities for frequent sharing of views and closer cooperation between county board officers and representatives of the State Board and Department of Agriculture.

D I V I S I O N O F A D M I N I S T R A T I O N

William E. Kenny, Director

The Department of Agriculture includes five divisions and the Office of Milk Industry. The divisions of Animal Industry, Information, Markets and Plant Industry and the Office of Milk Industry conduct the regulatory, service and promotion programs established by law and the State Board of Agriculture. To assist those units in the accomplishment of their responsibilities, the Division of Administration provides fiscal, personnel and general service support. In addition, the Division performs services for the State Board of Agriculture and conducts special projects unrelated to the work of the other divisions.

FISCAL

Except for the Office of Milk Industry, whose funds are provided by separate appropriation, the Division of Administration manages all Department fiscal matters. Department revenues are transmitted to the State Treasurer; appropriations are obtained and allotted to the Divisions and their various projects; and all expenditures are made and recorded in accordance with State policies.

Revenues consist of product promotion taxes, license fees, and inspection fees. The apple, asparagus, poultry and white potato taxes are deposited in special accounts and dedicated for use by the respective councils. License fees and inspection fees are deposited in the General Treasury of the State of New Jersey.

In addition to the special product promotion funds, the Department receives operating funds from the State of New Jersey and the United States Government. State funds, the major source of operating money, are provided in the annual State budget. Federal funds are provided under certain cooperative matching fund agreements with the United States Department of Agriculture.

The following summarizes Department appropriations and expenditures for the fiscal year 1963-64.

Source of Funds	Amount Expended
General Treasury funds	$1,354,870.47
State Board of Agriculture-Federal Loan Fund	14,283.13
Federal matched funds	46,192.36
Promotion tax funds	252,292.87
Total	$1,667,638.83

PERSONNEL

All Department personnel matters, including those for the Office of Milk Industry, are transacted by the Division of Administration. Since personnel actions involve Civil Service regulations and monetary requirements, conformance with fiscal and Civil Service policies is imperative.

During the year, the Department maintained 203 permanent, full-time positions. These positions were financed as follows:

Source of Funds	Number of Positions
General Treasury funds	146
State Board of Agriculture Federal Loan Fund	2
Federal funds	6
Promotion Council funds	10
Office of Milk Industry funds	39
Total	203

In addition, part-time clerical employees were assigned to the 14 soil conservation districts; some 26 seasonal assistants were employed for plant pest eradication, poultry certification and marketing projects; and the New Jersey Agricultural Society employed 72 fruit and vegetable inspectors. Although Society employees are not paid from State funds, they are employed under Department supervision.

During the year, the following staff changes occurred among permanent personnel:

Appointments

William F. Conlon, Inspector, Plant Industry, November 11, 1963

James H. Hausser, Inspector, Animal Industry, July 1, 1963

John D. Kegg, Supervisor, Plant Pest Surveys, July 1, 1963

Francis A. Raymaley, Director, Division of Markets, December 2, 1963

Lester R. Smalley, Jr., Supervisor, Fruit and Vegetable Standardization, March 30, 1964

Charles R. Wiegert, Auditor, Office of Milk Industry, September 23, 1963

Promotions

Myron W. Flint, Supervisor, Agricultural Statistics, January 1, 1964

Eugene S. Taylor, Chief, Bureau of Agricultural Economics and Statistics, January 1, 1964

Charles A. Thom, Senior Inspector, Plant Industry, September 16, 1963

Retirements

Fred Braun, Jr., Senior Inspector, Plant Industry, June 30, 1964

Clesson E. Cobb, Senior Inspector, Plant Industry, June 30, 1964

Helen Q. Elmer, Secretarial Assistant II, June 30, 1964

John M. Fenton, Chief, Bureau of Agricultural Economics and Statistics, January 3, 1964

Anna L. Pilla, Principal Clerk Stenographer, June 30, 1964

Alvah W. Severson, Chief, Bureau of Market Reporting and Cooperatives, June 30, 1964

Chester D. Schomp, Deputy Director, Office of Milk Industry, June 30, 1964

George E. Woodruff, Investigator, Licensing and Bonding, December 31, 1963

Resignation

John K. Springer, Supervisor, Plant Pest Surveys, June 28, 1963

ADMINISTRATIVE SERVICES

Printing, machine data processing and graphic arts services were provided to the entire Department. In addition, the Division maintained a forms control program, performed work procedure studies, and conducted a self-evaluation of the Department's organization.

During the year, more than 1,500,000 printing impressions were made in the print shop. These included many Department forms, reports, and publications reproduced by the offset method.

The machine data processing unit maintained livestock disease control and poultry certification records; computed veterinary practitioner invoices; printed milk handler licenses; and provided considerable statistical data. The equipment was leased under contract and maintained by Division personnel.

Graphic arts services included the design and production of Department work forms, recipe folders, and visual aids. The installation of a Varityper machine substantially improved the quality and reduced the cost of these productions.

Under the forms control program, a partial review of all Department work forms was continued. In agreement with the divisions, 21 new forms were developed, 43 were revised, and 56 were eliminated.

Work procedure evaluation was also continued. This program had two objectives. These were: (1) to seek the most efficient procedure and work methods for Department programs; and (2) to formally record approved procedures to expedite employee training. During the year, four procedures were newly recorded. Milk licensing methods were modified to eliminate 20,000 manual entries.

The self-evaluation of the Department organization was continued. Appraisals developed from employee questionnaires and personal interviews were summarized and reported to the secretary. Upon the secretary's approval of a proposed reorganization, annual objectives will be established.

J. Gilbert Sholin

On January 13, 1964, J. Gilbert Sholin, supervisor of administrative services succumbed from a second coronary attack. Mr. Sholin joined the Department in 1928 as a clerk-stenographer. At the time of his death, he was responsible for fiscal management, machine data processing, and duplicating services. He played a most important role in the development of the new Health and Agriculture Building. His interest in Department programs and his long experience will be difficult to replace.

HEALTH-AGRICULTURE BUILDING

Division personnel devoted considerable time to the requirements of the new Health and Agriculture Building. On June 30, 1964, construction was reported to be on schedule. An October 1964 occupancy was still anticipated.

Throughout the year, members of the Division staff participated in weekly conferences with the State Treasurer and Bureau of Construction personnel. In addition, continuous liaison was maintained with the architect, the consulting engineer, and the 11 prime contractors. Efforts were also made to accommodate in the building certain Federal agricultural agencies with which the Department has close work relationships.

MISCELLANEOUS SERVICES

The Division carpenter shop constructed, erected and maintained Department exhibits at the New Jersey State Fair and the Farm Show. Print shop and office benches and shelving were also constructed as were insect traps for field use.

Division personnel were also responsible for liaison with the new central motor pool. This included the procurement of vehicles for Department employees and the maintenance of project transportation cost records.

In anticipation of the move to the new building, the Department's property inventory was completed and classified for location in the new offices.

STATE BOARD OF AGRICULTURE FEDERAL LOAN FUND

The State Board of Agriculture Federal Loan Fund was established in 1952. At that time the United States Department of Agriculture commenced to transfer assets of the defunct Rural Rehabilitation Corporation to the New Jersey Secretary of Agriculture. Transferred assets now total $300,000.

These funds have been used to make loans to qualified New Jersey farmers for the purchase of farms, equipment and livestock, for the installation of irrigation facilities, and for the construction of farm labor housing.

All outstanding loans, with the exception of one, were made through the Farmers Home Administration of the United States Department of Agriculture. The exception is a direct loan to a cooperative. Negotiated in 1962, that loan was made for new equipment to improve the handling and packaging of eggs.

All Farmers Home Administration negotiated loans were government insured. To help the borrowers, Farmers Home Administration supervisors provided management advice. The outstanding success the fund has enjoyed must be credited to the efforts of those supervisors.

In 1963-64, the Fund issued four loans totaling $54,700. On June 30, 1964, there were outstanding 28 loans which totaled $252,660.09. Interest earnings for the year were $10,852.48. This income was used for administrative expenses and for market expansion studies on New Jersey farm products.

NEW JERSEY JUNIOR BREEDERS FUND

The New Jersey Junior Breeders Fund is a non-profit corporation which provides loans to farm youth. Established by endowment in 1921, the program has since been administered by the Department. Members of the State Board of Agriculture have served as trustees of the Fund. For 1963-64, the officers were: W. Stuart Hartung, president: Reginald V. Page, vice-president: Phillip Alampi, secretary-treasurer, and William E. Kenny, assistant secretary-treasurer.

During the year, 112 loans, totaling $12,693.36, were made to 4-H club members and to vocational agricultural students. Interest earnings were used to provide each borrower a one-year subscription to a breed journal, to purchase ribbons and trophies, and to make cash awards at State livestock shows in which the borrowers participated. In addition to those incentives, New Jersey Agricultural Society and Frelinghuysen Memorial Awards were made to encourage the youngsters.

The emergency fund insurance program relieved two owners of non-breeding dairy heifers of their loan obligations. These charges totaled $315.

NEW JERSEY FARMERS WEEK

New Jersey Farmers Week was observed in Trenton, January 27 through February 1, 1964. The six days of activity included the State Agricultural Convention and 40 meetings of State farm organization.

An innovation was two general forums on subjects of vital concern to the agricultural community. The first entitled "Agriculture Listens to Labor," featured Joseph A. Bierne, president of the Communications Workers of America, and New Jersey Commissioner of Labor and Industry Raymond F. Male. The second forum, "Conservation and the Agricultural Responsibility," dealt with areas of responsibility in conserving our natural resources. Vernon D. Northrop, alternate Federal Commissioner of the Delaware River Basin Commission, shared the rostrum with Robert A. Roe, State Commissioner of Conservation and Economic Development, and Dr. Firman E. Bear.

NEW JERSEY FARM SHOW

Under the theme "Salute to the New Jersey Tercenternary," the 1964 Farm Show was held on January 28, 29 and 30 in conjunction with New Jersey Farmers Week. Some 12,000 persons visited the exhibition which was jointly sponsored by the Department and the New Jersey Agricultural Society.

Staged in the Trenton Armory, 54 commercial exhibitors leased 7,600 square feet of floor space. Educational exhibits and commodity shows occupied an additional 6,350 square feet.

Outstanding events included the apple, Christmas tree, egg, hay and silage, honey, seed and grain, sweet potato, and white potato shows. Premium awards for those competitions totaled $1,720. Special trophies, plaques, and ribbons were also presented to the winners.

NEW JERSEY STATE FAIR

For the second consecutive year, the Department managed the New Jersey State Building at the New Jersey State Fair. Each department of State government participated in the exhibition. Division of Administration staff members planned, coordinated, and supervised the entire effort.

LIVESTOCK PROMOTION

The Division continued livestock promotion work. In the annual budget, a $3,000 request was included to aid one-day livestock shows. Those funds were allotted to purebred dairy breed associations and to a beef breed association which applied for the assistance.

Special effort was directed toward the horse and pony industry. Thoroughbred breeders who exhibited outstanding yearlings, brood mares and foals received awards totaling $1,000. Standardbred breeders of winning horses in New Jersey Championship Races received awards totaling $500.

Staff personnel contributed to the organization of a brochure on Monmouth County Horse Breeding. In addition, assistance was provided toward the publication of The Trotting News a quarterly newsletter with a circulation of 1,000.

In cooperation with the State Racing Commission, considerable time was devoted toward the development of a New Jersey horse breeding incentive program. Plans leading to preliminary legislation for this program were completed.

D I V I S I O N O F A N I M A L I N D U S T R Y

Dr. E. L. Brower, Director

BUREAU OF LIVESTOCK DISEASE CONTROL

Bovine Brucellosis

The brucellosis program continued to advance toward the goal of complete eradication of the disease. Only 159 reactors were found this year compared with 227 last year.

A new procedure was added to the program on an experimental basis. The Livestock Cooperative Auction Market at Hackettstown, Jaeger's Livestock Auction Market at Sussex and Flemington Auction Market at Flemington are cooperating in this new venture. At the markets, a backtag is affixed to each adult dairy and beef animal. This tag is used to identify the animal and the owner. When the animal is slaughtered, a sample of blood is taken and sent to a laboratory where it is tested for brucellosis. If the animal is a reactor, it is traced back to the herd of origin and the entire herd is tested.

The object of the new procedure is to reduce the frequency of on-farm testing. At present each dairy herd is blood tested at least every two years. This means that about 60,000 cattle are tested each year. About 30,000 cattle pass through the eight livestock markets in the State each year. If the new procedure works out as anticipated, the number of visits to farms for the purpose of drawing blood samples could be reduced. This would greatly reduce the cost of the program without jeopardizing the goal of complete eradication of the disease.

To supplement the brucellosis blood testing program, New Jersey dairy herds are checked through the use of the brucellosis ring test. Samples of milk from all herds are secured three times a year by the Department's area veterinarians. This year 7,442 milk samp les were taken, of which 109 samples were found to be suspicious. This includes 1,162 samples of milk from out-of-state herds whose milk is sold in New Jersey. Fifteen of these were suspicious. The 91 suspicious New Jersey herds were immediately blood tested and 21 of these herds disclosed 37 reactors on initial test.

One of the main tools in the prevention of brucellosis is the calfhood vaccination program. The Division vaccinated 13,402 calves this past year.

Two counties, Bergen and Cumberland, were designated brucellosis-free during the fiscal year bringing the total of free counties to twelve. A "free county" means that all brucellosis infection has been eliminated from the herds in that area. Our goal is for the State of New Jersey to become entirely brucellosis-free by 1965.

Bovine Tuberculosis

The incidence of tuberculosis was once again reduced. This was evidently due mainly to the suspect classification that was inaugurated last year.

This year, 165 animals were classified as reactors and sent to slaughter. Two hundred and nine were classified as suspects. On the 60-day retest of the suspects, only seven were found to be reactors. These figures show a considerable saving to the State and to the farmer.

Of the reactors this year, only seven showed lesions of tuberculosis. Five of these were from a badly infected herd that had 36 reactors during the year. One suspect that was sent to slaughter prior to being retested showed a lesion of tuberculosis.

At the end of the fiscal year, only 11 herds were classified as infected with tuberculosis. This compares with 22 infected herds on the same date last year.

Only 95 farms were listed as newly infected with tuberculosis as compared with 152 for 1962-1963.

Due to the low incidence of actual lesion cases of tuberculosis, a new plan of testing was submitted to the State Board of Agriculture for their consideration. All dairy, beef and goat herds would be tested biennially instead of annually. This procedure would also reduce the cost of the tuberculosis eradication program.

Leptospirosis

Tests for leptospirosis were conducted on a request basis this year. A total of 2,125 samples was tested, of which 63 showed titres of 1:10 through 1:40, 4 showed titres of 1:160 or higher, and 2,058 were negative.

Sheep Scabies

The State was declared a free area for sheep scabies on June 14, 1963, following a complete inspection of all sheep. No infection was found at that time. Two inspections of all sheep were made this year without evidence of any infection. Six hundred and ninety-five flocks, totaling 15,673 sheep, were under supervision.

Cleaning and Disinfecting

The use of the Federal power spray equipment increased over last year. During the winter months, this operation was somewhat curtailed because of the cold and snow. Some farmers were reluctant to turn their cows out during inclement weather so that the disinfecting spraying could be done. These farms were disinfected by the owners who sprayed a small area at a time, using their own equipment. Twenty-two dairy farms were disinfected on account of brucellosis and eight because of tuberculosis infection.

Auction Markets

Eight livestock auction markets are under the supervision of the Division of Animal Industry. Area veterinarians are assigned to the markets in their sections. These markets operate weekly. It is the duty of the area veterinarian to see that no livestock consigned for slaughter is returned to farms. He also checks to see that no diseased animals are sold.

During the fiscal year, the number of livestock that passed through these markets totaled 159,983 head.

Cattle Violation

At a hearing before the assistant secretary of agriculture on November 4, 1963, Carl Daniel and Sons, Flemington cattle dealers, were fined $200 for moving a cow, without authorization, from their herd which was under quarantine for brucellosis.

The violation of the quarantine and of the State cattle dealers' law was discovered by a Department veterinarian who was making a routine test of the herd of a Neshanic dairy farmer. He found a cow that had not been in the herd at the time of the previous periodic test and which the farmer said he had purchased from Carl Daniel and Sons. Upon further investigation, it was found that the cow came from one of the Daniels' herds which had been quarantined by the Department because of the presence of brucellosis disease. Such quarantines are imposed by the Department to prevent the spread of cattle diseases.

Carl Daniel and Sons had previously been found guilty of the same charge and had been assessed a $50 fine.

The assistant secretary further ruled that any cattle dealer's license issued now or in the future to Carl Daniel and Sons will be conditional, subject to revocation upon any further violations of the cattle dealers' law.

New Regulations

On November 26 the Board of Agriculture approved a change in the regulations for testing of cattle for brucellosis. The old regulations stated that the "complete herd test for brucellosis shall include all officially calfhood vaccinated cattle which have calved or which are 30 months of age or older, and all other cattle nine months of age or over." This paragraph was eliminated and in the future the Uniform Methods and Rules of the Bovine Eradication Program as published by the United States Department of Agriculture will be followed.

Under these rules a complete herd test includes all cattle over eight months of age except steers, spayed heifers, and official vaccinates under 30 months of age which are not parturient (springers) or post-parturient.

We have found that vaccinated animals that continue to show titre or reaction to the Brucella test and are pregnant or have calved and are under 30 months of age are dangerous in controlling the spread of brucellosis in the herd.

A change in the regulations regarding indemnity to conform with the testing regulations was also approved.

Swine Disease Control

New Jersey continues to maintain the largest garbage feeding swine industry in the United States. All garbage feeding farms must be inspected and licensed annually. Two hundred and thirty licenses were issued to garbage feeding swine farms this year. Twenty-five of these farms depopulated or switched to grain feeding during the year, leaving a total of 205 licensed garbage feeding farms containing 129,232 swine.

The garbage cooking law requires that these farms be maintained in a sanitary condition and that garbage fed to swine be properly heat treated. Bi-weekly inspections are made of all garbage feeding farms and temperatures of garbage cooking are taken at least monthly. This work is done by Division and Federal livestock inspectors. From July 1, 1963, to June 30, 1964, 4,949 inspections were made.

The cooking of garbage is very vital to control of swine diseases like foot-and-mouth disease, hog cholera, vesicular exanthema and trichinosis, which may be spread through raw garbage.

Swine inspectors are constantly on the lookout for any disease condition in swine. These diseases are reported to area veterinarians who then make an investigation.

No violations of the garbage cooking swine law were disclosed. On two separate weekends during the year, the swine inspectors visited all of the farms but found no evidence of feeding raw garbage.

Hog Cholera Eradication

After much study, the Hog Cholera Eradication Committee recommended new regulations to the State Board of Agriculture concerning the eradication of this disease. New Jersey is in the first or preparatory phase of a four-phase cooperative program leading to the final eradication of hog cholera.

Phase one is the establishment of a hog cholera committee, the distribution of information, development of a system for prompt reporting, complete investigation of all outbreaks and re-emphasis on garbage cooking and inspection. All of these items have been taken care of and, with the passage of the new regulations, New Jersey will move into phase two: reduction of incidence of hog cholera. The new regulations will provide for the effective quarantine of infected and exposed herds, proper disposal of infected and exposed animals, and increased vaccination of all swine. The new regulations also provide that after 85 per cent of the swine in the State are under the vaccination program, New Jersey can enter phase three in which indemnity payments will be made for the loss of swine infected or exposed to this disease, with State and Federal indemnities being paid on a matching basis.

The fourth and final phase of the program, when the State can be declared hog cholera-free, will not become effective until no hog cholera has been diagnosed for a period of at least a year and there is protection against

reinfection. In all probability, when this phase is reached, vaccination with modified live virus vaccine will have been eliminated and killed vaccines will be used to insure that the virus of hog cholera will not be reintroduced.

During the year, seven outbreaks of hog cholera were reported and investigated. In most cases, the disease was confirmed by post-mortem findings in the field and by laboratory tests. In one case, specimens were sent to the National Animal Disease Laboratory at Ames, Iowa, where it was confirmed.

Reports of the sales of hog cholera vaccine have increased tremendously during the past year, indicating that the swine industry is aware of the program. The new regulations will require that veterinarians vaccinating swine report these vaccinations on charts supplied by the Department and that the swine be identified by ear tags.

Inspection of Disposal Plants

Division personnel inspected 42 animal disposal plants prior to licensing, as required by State law.

Anthrax

Not a single case of anthrax, a serious disease affecting almost all species of livestock, has occurred in New Jersey in the past two years.

The Division has been conducting a control program against this disease for many years. Prior to the past two years, sporadic cases of anthrax had been reported each year and there had been occasional outbreaks.

An important part of this control program is the annual immunization of livestock in the endemic area of Salem County. Certain low-lying sections of this County, usually tidal land, are infected. Because the anthrax spores can remain in the soil for many years, measures to protect the livestock are made. It is hoped that this very favorable report can be continued.

Equine Infectious Anemia

Two suspected cases of equine infectious anemia (swamp fever) were reported during the year. One victim in North Jersey died, but post-mortem examination revealed a kidney condition and not infectious anemia. The other case was reported at the Garden State Race Track in Camden. Studies of this case were inconclusive and the animal was transferred to the University of Pennsylvania Veterinary School for further investigation.

Viral Encephalitis

The Division cooperated with the Department of Health in securing specimens and reporting all cases of encephalitis in horses and pheasants. There were no reported cases during the year and the number of vaccinations decreased. As with most diseases in which a vaccination program is urged for the protection of animals, the number of vaccinations decreased when the disease is not prevalent.

Biological Warfare

Veterinarians and livestock inspectors on both the State and Federal staffs are trained and assigned specific areas of responsibility in the event of biological warfare or introduction into the State of a foreign animal disease.

Cooperation With Federal Government

The Division of Animal Industry cooperates with the Animal Disease Eradication Branch of the Federal Government in certain programs that are not formally assigned to this Department. These include the examination of animals for export and the collection of information and specimens when disease conditions are suspected.

Inspection of Turkeys for 'State Seal of Quality'

Each year, in cooperation with the Poultry Products Promotion Council of the Division of Markets, the Division of Animal Industry has its area veterinarians conduct ante-mortem and post-mortem inspections of turkeys which are to be marketed under the "State Seal of Quality" program.

The following tabulation summarizes the work:

Ante-Mortem Inspection

Month	No. Birds Inspected	Approx. Weight	No. Birds Condemned	No. Lbs. Condemned
September	925	14,765	...	...
October	3,605	69,265	...	...
November	13,431	272,812	...	...
December	14,236	334,065	4	55
Totals	32,197	690,907	4	55

Post-Mortem Inspection

Month	No. Birds Inspected	Approx. Weight	No. Birds Condemned	No. Lbs. Condemned
September	376	4,994	...	...
October	2,706	43,449	5	90
November	12,472	211,629	2	32
December	14,193	282,362	7	117
Totals	29,747	542,434	14	239

POULTRY DISEASE CONTROL

Pullorum Disease

Two cases of pullorum disease were found this year by the College of Agriculture at Rutgers University. Both flocks of chickens were commercial egg producers and did not relate directly to any of our New Jersey hatcheries. There were three cases of pullorum disease last year.

The pullorum-typhoid blood testing program for poultry was completed in cooperation with the Division of Markets. All chickens and turkeys tested continued to maintain their N.J.-U.S. Pullorum-Typhoid Clean status in the National Poultry and Turkey Improvement Plans.

Fowl Typhoid

Six cases of fowl typhoid were diagnosed during the year. Two of these flocks were destroyed. The remaining four flocks are being maintained on medication along with two flocks from the previous year.

It is believed that progress has been made in the control of this disease. The present method of cooperation between the poultrymen and the Department has been very successful. It appears that this disease has been slowed down considerably due to poultry health education, and the cleaning and disinfecting program.

Avian Tuberculosis

Four cases of avian tuberculosis were diagnosed by poultry diagnostic laboratories and the Federal slaughtering and dressing plants. All four cases were eradicated.

Paratyphoid

Eight cases of paratyphoid were reported since July 1, 1963:

4 cases - chicken
2 cases - pigeon
1 case - canary
1 case - African finch

All eight cases were diagnosed by routine laboratory examinations. This disease is still causing much concern among avian disease workers and is being investigated continually.

Cleaning and Disinfecting

Cooperation continued with the Animal Disease Eradication Division, United States Department of Agriculture, in disinfecting poultry houses where avian diseases such as pullorum, fowl typhoid and paratyphoid were present. The poultry farmer makes the purchase of the approved disinfectant. Both State and Federal personnel operate the Federal disinfecting equipment. Thirteen poultry farms were disinfected during the year.

Cooperation With Other Agencies

The cooperative reporting system with the Animal Disease Eradication Division, United States Department of Agriculture, on avian disease investigations has progressed satisfactorily.

Reports at the various poultry meetings indicate more accurate knowledge of the health status of the nation's poultry. Poultry diagnostic laboratories in and out of the State continued their fine cooperation in reporting avian diseases.

Salmonella Investigations

The Salmonella derby investigation involving New Jersey eggs supplied to North Jersey hospitals was completed. The investigation was started May 29, 1963. By the end of the survey, 10,014 specimens from New Jersey farms involving 404,630 chickens had been examined. Samples of fecal material, dust, feed and egg-washing liquid were examined. Twenty-five isolations of Salmonella were disclosed representing nine different serotypes as follows:

S. typhimurium, S. muenchen, S. montevideo, S. st. paul, S. kentucky, S. heidelberg, S. tennessee, S. bredeney and S. anatum.

No Salmonella derby was recovered.

Pleuropneumonia-like Organisms (PPLO)

A program in the experimental category was started this year on a flock of breeder turkeys. Great losses, caused by pleuropneumonia-like organisms occurred in this flock. The entire flock of infected turkeys was slaughtered, completely depopulating the farm. The houses and pens were cleaned and disinfected and restocked with disease free turkey poults. The plate serum test using the Minnesota antigen was completed on 2,024 samples. This included retests of random samples at varied intervals. The results were most encouraging with all negative results. It is very probable that a program will be inaugurated in the near future for testing chickens and turkeys for PPLO.

Newcastle Disease

A report was received April 8 from the Rutgers University College of Agriculture relative to a virus isolated from a flock of White Leghorn chickens. It was suspected that the virus recovered might be the organism that causes fowl plague (European fowl pest). Inasmuch as no anti-plague serum was immediately available to assist in the diagnosis, investigations were started and precautions taken against this dreaded poultry disease. However, later neutralization tests with anti-plague serum proved negative. Further tests indicated the virus to be that of a virulent type of Newcastle disease. All chickens in the flock were slaughtered under supervision and the entire premises cleaned and disinfected.

CATTLE UNDER SUPERVISION
1954 - 1964

	Herds	Animals	Tuberculosis Reactors Indemnified	Brucellosis Reactors Indemnified	Calves Officially Brucella Vaccinated
1963-1964	4,714	143,653	147	155	13,402
1962-1963	5,502	153,804	274	211	15,935
1961-1962	5,921	172,363	296	267	16,494
1960-1961	6,327	175,278	230	418	17,655
1959-1960	5,717	173,532	148	440	18,033
1958-1959	6,771	174,203	150	759	16,305
1957-1958	6,987	175,026	175	1,224	15,665
1956-1957	8,014	185,327	162	1,830	16,179
1955-1956	8,488	194,937	141	2,133	17,514
1954-1955	9,483	204,620	173	1,801	17,886

CATTLE AND GOAT SURVEY

	Cattle			Goats	
County	Herds	Adults	Heifers	Herds	Animals
Atlantic	34	89	24	5	29
Bergen	28	283	55	12	64
Burlington	385	13,338	2,688	9	29
Camden	57	588	142	10	69
Cape May	24	157	47	...	...
Cumberland	224	3,411	859	10	26
Essex	11	134	15	2	2
Gloucester	216	2,341	997	20	41
Hudson	2	7	...	1	18
Hunterdon	822	19,757	5,068	42	266
Mercer	183	3,186	530	3	7
Middlesex	119	3,295	228	10	19
Monmouth	197	3,804	775	14	38
Morris	240	5,021	670	27	223
Ocean	41	559	205	4	8
Passaic	27	107	16	8	22
Salem	493	11,020	3,413	5	13
Somerset	303	6,475	1,088	25	80
Sussex	618	22,898	4,326	6	19
Union	11	41	...	2	8
Warren	664	21,210	4,644	19	72
Totals	4,699	117,721	25,790	234	1,053

SUMMARY OF TESTING

TUBERCULOSIS ERADICATION PROGRAM

Veterinarians Testing	Cattle Lots	Cattle Animals	Goats Lots	Goats Animals
State	708	16,006	41	190
Federal	293	6,158	44	210
State & Federal Expense	3,212	101,089	102	578
Owner's Expense	650	5,254	9	41
Auction Markets(Owner's Expense)	334	818	...	...
Totals	5,197	129,325	196	1,019

Suspects - 209 (Of this number, 7 were classified as reactors upon retest)
Reactors - 165 - 0.13%

BRUCELLOSIS ERADICATION PROGRAM, BLOOD TESTING

Veterinarians Testing	Cattle Lots	Cattle Animals	Goats Lots	Goats Animals	Misc. Lots	Misc. Animals
State	818	13,589	41	184	...	...
Federal	415	9,503	43	202	...	...
State & Federal Expense	1,849	49,830	93	550	9	97
Owner's Expense	999	9,528	13	53	...	...
Auction Markets(Owner's Expense)	246	519	...	...	...	...
Totals	4,327	82,969	190	989	9	97

Reactors - 159 - 0.19%
Miscellaneous includes eight lots containing 94 swine and one lot of three horses.

BRUCELLOSIS ERADICATION PROGRAM, BRUCELLOSIS RING TESTING

	Division of Animal Industry Laboratory	Out-of-State Laboratories	Total
Herds tested	6,176	379	6,555
Animals in tested herds	287,335	14,742	302,077
Clean herds	6,086	378	6,464
Animals in clean herds	282,725	14,717	297,442
Suspicious herds	90	1	91
Animals in suspicious herds	4,610	25	4,635

BRUCELLOSIS TESTS OF IMPORTED ANIMALS

Veterinarians Testing	Cattle Lots	Cattle Animals
State	551	4,308
Federal	309	3,280
Accredited	147	2,772
Totals	1,007	10,360

TUBERCULOSIS REACTORS INDEMNIFIED

July 1, 1963 to June 30, 1964

Cattle appraised	Total	
Registered	48	
Grade	99	
Total	147	
Salvage		**Average**
Registered	$ 6,500.25	$ 135.42
Grade	13,679.71	138.18
Total	$ 20,179.96	$ 137.28
State indemnity		
Registered	$ 7,197.25	$ 149.94
Grade	7,324.28	73.98
Total	$ 14,521.53	$ 98.79
Federal indemnity		
Registered	$ 2,400.00	$ 50.00
Grade	2,459.74	24.85
Total	$ 4,859.74	$ 33.06
Sum of salvage, Federal and State indemnity	$ 39,561.23	$ 269.12

Total State indemnity paid for tuberculin test reactors from the beginning of this work in 1916 to June 30, 1964: $ 4,221,553.97

BRUCELLOSIS REACTORS INDEMNIFIED

July 1, 1963 to June 30, 1964

Cattle appraised	Total	
Registered	16	
Grade	139	
Total	155	
Salvage		**Average**
Registered	$ 2,083.34	$ 130.21
Grade	19,975.32	143.71
Total	$ 22,058.66	$ 142.31
State indemnity		
Registered	$ 2,400.00	$ 150.00
Grade	10,301.51	74.11
Total	$ 12,701.51	$ 81.95
Federal indemnity		
Registered	$ 800.00	$ 50.00
Grade	3,446.01	24.79
Total	$ 4,246.01	$ 27.39
Sum of salvage, Federal and State indemnity	$ 39,006.18	$ 251.65

Total State indemnity paid for brucellosis test reactors from the beginning of this work in 1940 to June 30, 1964: $ 1,139,074.58

BRUCELLOSIS SERVICE FEES AND INDEMNITY PAID

1954 - 1964

	State Indemnity Paid	Federal Indemnity Paid	State Veterinary Service Fees for Testing	Federal Veterinary Service Fees for Testing	State Veterinary Service Fees for Vaccination	Federal Veterinary Service Fees for Vaccination
1963 - 1964	$ 12,701.51	$ 4,246.01	$ 13,615.90	$ 4,542.35	$ 10,387.05	$ 4,489.00
1962 - 1963	16,290.70	5,425.00	13,602.65	6,365.35	13,580.25	4,017.00
1961 - 1962	21,412.85	7,148.84	17,514.00	6,980.35	11,956.90	6,674.00
1960 - 1961	33,069.20	11,025.00	8,105.50	17,473.75	11,014.15	8,589.50
1959 - 1960	34,878.77	11,647.20	15,761.75	13,735.45	10,862.40	10,488.50
1958 - 1959	61,368.35	20,559.71	543.75	34,004.10	1,292.50	17,370.50
1957 - 1958	98,268.10	33,164.99	2,279.90	37,373.95	1,051.95	17,242.50
1956 - 1957	143,400.01	48,048.65	8,542.85	47,336.63	9,636.50	10,173.50
1955 - 1956	168,913.00	56,516.13	14,433.25	41,585.98	22,024.50	...
1954 - 1955	142,561.23	46,105.99	24,880.25	18,554.00	20,790.50	...

CATTLE AND GOATS IMPORTED AND RELEASED

July 1, 1963 to June 30, 1964

Origin	Adult Dairy and Breeding	Calves Under 6 Mos. and Vaccinated Animals Under 24 Mos.	Feeder Steers	Goats	Sheep
Alabama	...	...	73	...	...
Arizona	12	...	...	...	...
California	...	...	...	2	...
Canada	1,861	20	...	...	...
Connecticut	90	1	...	...	...
Delaware	123	27	...	...	...
Illinois	3	7	...	...	2,994
Indiana	1	...	...	...	...
Kansas	...	...	...	...	260
Kentucky	...	1	...	...	...
Maine	3	...	...	...	...
Maryland	291	85	3	...	...
Massachusetts	2	...	...	...	...
Michigan	365	3	...	...	...
Minnesota	69	...	50	...	...
Missouri	...	1	...	...	3
Nebraska	...	...	37	...	...
New Mexico	...	...	...	...	435
New York	2,178	104	12	...	20
North Carolina	...	...	...	1	...
Ohio	93	...	...	...	...
Oklahoma	...	...	...	...	6
Pennsylvania	794	91	268	59	19
South Carolina	1	1	...	...	...
South Dakota	...	24	...	...	...
Tennessee	1	...	...	...	...
Texas	2	1	...	...	...
Virginia	8	...	247	...	1
Washington	3	1	...	...	...
West Virginia	...	...	36	...	...
Wisconsin	4,388	186	...	...	...
Totals	10,288	553	726	62	3,738

CATTLE, GOATS, SHEEP AND SWINE SHIPPED OUT OF NEW JERSEY

July 1, 1963 to June 30, 1964

Destination	Cattle		Goats		Sheep		Swine	
	Lots	Animals	Lots	Animals	Lots	Animals	Lots	Animals
Alabama	2	5	...	...	...	...	...	...
Arizona	...	...	2	7	...	...	...	...
Arkansas	2	2	...	...	...	...	...	...
California	5	7	...	...	...	...	...	...
Canada	11	17	...	...	...	...	...	...
Colorado	24	24	...	...	...	...	...	...
Connecticut	12	33	...	...	...	...	1	1
Costa Rica, C.A.	4	13	...	...	...	...	...	...
Delaware	42	73	...	...	...	...	1	5
Dominican Republic, C. A.	1	1	...	...	...	...	...	...
Ecuador, S. A.	1	7	...	...	...	...	...	...
Florida	5	45	...	...	1	1	...	...
Georgia	4	16	...	...	...	...	...	...
Guatemala, C. A.	1	1	...	...	...	...	...	...
Illinois	7	15	...	...	...	...	...	...
Indiana	9	10	...	...	...	...	1	5
Iowa	4	27	...	...	...	...	...	...
Kentucky	10	20	...	...	...	...	...	...
Louisiana	9	9	...	...	...	...	...	...
Maine	1	2	...	...	...	...	...	...
Maryland	79	416	...	...	...	...	3	25
Massachusetts	1	5	...	...	4	4	...	...
Michigan	26	59	...	...	...	...	...	...
Minnesota	1	1	...	...	...	...	...	...
Mississippi	3	41	...	...	...	...	...	...
Missouri	8	48	...	...	...	...	...	...
Montana	2	15	...	...	...	...	...	...
New Hampshire	3	3	...	...	...	...	...	...
New Mexico	1	1	...	...	...	...	...	...
New York	101	507	...	...	...	...	7	22
Nicaragua, C. A.	1	3	...	...	...	...	...	...
North Carolina	54	406	...	...	...	...	...	...
Ohio	37	49	...	...	...	...	...	...
Oklahoma	2	2	...	...	...	...	...	...
Oregon	1	1	...	...	...	...	...	...
Pennsylvania	461	1,790	...	...	...	...	6	43
Republic of South Africa	1	1	...	...	...	...	...	...
Rhode Island	2	7	...	...	...	...	...	...
South Carolina	25	192	...	...	...	...	...	...
Tennessee	26	696	...	...	...	...	...	...
Texas	17	24	...	...	...	...	...	...
Vermont	1	1	...	...	...	...	...	...
Virginia	60	417	...	...	...	...	1	1
Washington	4	4	...	...	...	...	...	...
West Virginia	1	1	...	...	...	...	...	...
Wisconsin	4	4	...	...	...	...	...	...
Totals	1,076	5,021	2	7	5	5	20	102

VACCINATION REPORT OF IMPORTED CATTLE

July 1, 1963 to June 30, 1964

Origin	Animals Imported	Animals Vaccinated
Arizona	12	...
Canada	1,881	1,808
Connecticut	91	83
Delaware	150	127
Illinois	10	8
Indiana	1	...
Kentucky	1	...
Maine	3	3
Maryland	376	335
Massachusetts	2	1
Michigan	368	368
Minnesota	69	69
Missouri	1	1
New York	2,282	2,196
Ohio	93	91
Pennsylvania	885	814
South Carolina	2	1
South Dakota	24	24
Tennessee	1	...
Texas	3	1
Virginia	8	6
Washington	4	2
Wisconsin	4,574	4,512
Totals	10,841	10,450

SHEEP INSPECTION FOR SCABIES

July 1, 1963 to June 30, 1964

	No. of Flocks	No. of Sheep
Farms under supervision	695	15,673
Semi-annual inspections, December & January	719	13,121
Semi-annual inspections, April & May	692	14,747
Other inspections during year	37	4,872[1]
Farms infected	...	...
Farms exposed	...	...
Farms suspicious	...	...
Dippings for year	...	...
Farms remaining under quarantine at end of year	...	...

[1] Includes 16 lots of inships with 3,738 sheep.

INSPECTION OF SWINE HERDS

July 1, 1963 to June 30, 1964

	State	Federal	Total
Farms feeding grain	120	108	228
Farms feeding heat-treated garbage	2,259	2,462	4,721
Totals	2,379	2,570	4,949

SWINE IMPORTED FOR FEEDING AND BREEDING

Feeder	64,142
Breeder	3
Totals	64,145

SWINE SURVEY
(Garbage-fed Swine)

County	Licensed Herds	Licensed Animals
Atlantic	29	3,753
Bergen	1	250
Burlington	26	16,819
Camden	5	1,665
Cape May	15	5,965
Cumberland	5	958
Essex	...	...
Gloucester	74	74,244
Hudson	...	...
Hunterdon	4	3,118
Mercer	7	1,590
Middlesex	6	945
Monmouth	15	14,929
Morris	8	1,618
Ocean	4	2,325
Passaic	...	...
Salem	2	80
Somerset	4	973
Sussex	...	...
Union	...	...
Warren	...	...
Totals	205	129,232

PULLORUM-TYPHOID CONTROL

Fowl tested in field	412,288
Number reacting	...
Per cent reacting	...
Fowl tested in laboratory	6,649
Number reacting	...
Per cent reacting	...
Total fowl tested	418,937
Total fowl reacting	...
Per cent reacting	...
Retest of fowl typhoid suspects by field tests	6,486
Total fowl reacting	...

NEW JERSEY EXPORTS OF HATCHING EGGS AND POULTRY

July 1, 1963 - June 30, 1964

Country to Which Consigned	No. Permits Issued	Baby Chicks	Cockerels	Hatching Eggs	Pullets
Argentina	1	...	...	25,000	...
Belgium	56	...	11,768	4,450	22,963
Bermuda	13	1,300	1,100	...	2,200
British Guiana	1	550	...	...	...
British West Indies	12	3,650	5,700	8,064	9,000
Burma	1	...	40	...	310
Cambodia	1	...	15	...	85
Canada	77	67,000	48,871	52,560	11,935
China	1	...	...	20	...
Congo	5	25,000	...	...	...
Dominican Republic	21	67,600	3,200	...	2,700
Dutch Guiana	71	37,520	112,700	...	4,680
Egypt	1	...	...	400	...
Germany	4	...	...	9,925	...
Greece	17	...	1,274	...	9,450
Guatemala	3	...	440	...	3,720
Italy	22	...	3,350	42,400	32,000
Japan	21	200	3,981	...	21,394
Lebanon	1	...	225	...	1,275
Malaya	2	...	80	...	750
Mexico	12	...	4,815	...	27,950
Nicaragua	1	...	100	...	800
Peru	3	200	24	...	3,600
Puerto Rico	279	167,200[1]	354,780	8,640	51,300
Spain	13	...	4,075	...	28,200
Venezuela	1	...	...	4,320	...
Viet-Nam	1	...	20	...	180
Virgin Islands	1	200	...	...	...
West Indies	36	1,200	825	230,976	6,000
Totals	678	371,620	557,383	386,755	240,492

[1]500 are turkey poults.

BUREAU OF VETERINARY DIAGNOSTIC LABORATORY

The diagnostic laboratory is vital in all of the programs of the Division of Animal Industry.

This year 96,529 plate and tube blood tests were conducted for brucellosis and leptospirosis of cattle and goats; 6,649 tests for pullorum-typhoid disease of chickens.

The laboratory also received samples of tissue, milk and other specimens submitted for diagnostic purposes from veterinary practitioners. Such diseases as mastitis, anthrax, encephalitis and other disease conditions are reported. The use of the laboratory by veterinarians for the benefit of the farmer has steadily increased.

DIVISION LABORATORY REPORT

July 1, 1963 to June 30, 1964

BLOOD TESTS MADE FOR BRUCELLOSIS ON INSHIPPED ANIMALS

Samples received	10,360
Unfit for test	11
Samples tested	10,349
Suspicious	11
Reactors	80
Negative	10,258

BLOOD TESTS MADE FOR BRUCELLOSIS ON ANIMALS IN HERDS UNDER SUPERVISION

Samples received	84,280
Unfit for test	225
Samples tested	84,055
Reactors	159
Suspicious	1,621
Negative	82,275

MILK RING (BRT) TESTS FOR BRUCELLOSIS

Samples received	7,442
Unfit for test	19
Samples tested	7,423
Suspicious	109
Negative	7,314

BLOOD TESTS MADE FOR LEPTOSPIROSIS OF ANIMALS

Samples received	2,134
Unfit for test	9
Samples tested	2,125
1:10 - 1:40 titres	63
1:160 or higher titres	4
Negative	2,058

BLOOD TESTS FOR "Q" FEVER OF ANIMALS

Samples received	285
Unfit for test	...
Samples tested	285
Positive	137
Negative	148

BLOOD TEST FOR VIBRIO OF ANIMALS

Samples received	133
Unfit for test	5
Samples tested	128
Reactors	10
Suspicious	33
Negative	85

MILK TEST FOR MASTITIS OF ANIMALS

Number of animals	432
Number of samples	1,625
Streptococci	278
Staphylococci	572
Other organisms	305
Negative	536

BLOOD TESTS MADE FOR PULLORUM DISEASE OF POULTRY

Samples received	6,649
Unfit for test	...
Samples tested	6,649
Reactors	...
Suspicious	...
Negative	6,649

BLOOD TESTS FOR PARATYPHOID (st. paul) OF POULTRY

Samples received	306
Unfit for test	...
Samples tested	306
Reactors	...
Negative	306

BLOOD TESTS FOR PLEUROPNEUMONIA-LIKE ORGANISMS (PPLO) OF POULTRY

Samples received	3,857
Unfit for test	3
Samples tested	3,854
Reactors	...
Suspicious	1
Negative	3,853

BACTERIOLOGICAL, MICROSCOPIC AND POST MORTEM EXAMINATION

July 1, 1963 to June 30, 1964

Lots	Animals	No.	Material	Condition Suspected	Findings
1	Avian		Feces and litter	Salmonellas	S. typhimurium
52	Avian	8,314	Fecal specimens	Salmonellas	8,292 negative 1 S. muenchen 3 S. anatum 2 S. st. paul 4 S. kentucky 3 S. montevideo 1 S. tennessee 7 S. bredeney 1 Group E_2
48	Avian	53	Feed specimens	Salmonellas	51 negative 1 S. heidelberg 1 S. montevideo
33	Avian	33	Water specimens	Salmonellas	Negative
35	Avian	35	Dust	Salmonellas	Negative
2	Avian	13	Cracked eggs	Salmonellas	Negative
2	Avian	17	Leaking eggs	Salmonellas	Negative
1	Avian	4	Dust	Salmonellas	S. st. paul
23	Avian	58	Chickens	S. pullorum and fowl typhoid	Negative
1	Avian	7	Chickens	Cause of death	Chronic respiratory disease
1	Avian	2	Chickens	Fowl typhoid	Fowl typhoid
2	Avian	6	Turkeys	S. pullorum	Negative
2	Avian	7	Chickens	Avian tuberculosis	Avian tuberculosis
1	Avian	1	Pigeon	Pathogens	Tumors
2	Avian	10	Chickens	Pathogens	Negative
1	Avian	6	Chickens	Salmonellas	S. typhimurium
1	Avian	4	Chickens	Pathogens	Blackhead
1	Avian	1	Squab	Paratyphoid	Negative
1	Avian	1	Turkey	Pleuro-pneumonia-like organisms	Negative
2	Bovine	2	Blood specimens	Anthrax	Negative
1	Bovine	1	Ear	Anthrax	Negative
1	Bovine	1	Internal organs	Anthrax	Negative
12	Bovine	71	Smegna specimens	Trichomonas vibrio	Negative
5	Bovine	33	Semen specimens	Trichomonas	Negative
9	Bovine	18	Blood specimens	Pathogens	Negative
1	Bovine	28	Semen specimens	Vibrio fetus	Negative
1	Bovine	1	Fecal specimen	Pathogens	Negative
1	Bovine	1	Fetus	Pathogens	Negative
1	Bovine	1	Fetus	Vibrio fetus	Negative

Lots	Animals	No.	Material	Condition Suspected	Findings
1	Bovine	1	Fetus	Vibrio fetus	Staphylococcus (hemolytic)
12	Bovine	102	Milk specimens	Brucellosis ring test	60 negative 39 suspects 3 unfit
7	Bovine	52	Milk specimens	Whey tests	34 negative 18 positive
2	Bovine	16	Milk specimens	Brucellosis culture	Negative
1	Bovine	1	Milk specimen	Culture	Pseudomonas spp.
7	Bovine	18	Milk specimens	Culture	10 negative 1 streptococcus 8 staphylococcus 1 yeast
1	Bovine	1	Calf	Pathogens	Anaerobic micrococci
1	Bovine	1	Water and urine	Pathogens	Negative
1	Bovine	1	Urine	Bacteria	C. renale
1	Bovine	1	Urine	Bacteria	Staphylococcus (ehmolytic)
1	Bovine	1	Urine	Bacteria	E. coli
1	Bovine		Glands and tumor	Cancer	Malignant lymphoma
1	Bovine		Skin scrapings	Mange	Negative
1	Bovine		Tissue		Skin lesion
1	Bovine	1	Blood specimen	White blood count, red blood count	Normal range
1	Canine	1	Skin scrapings	Culture	Staphylococcus
1	Canine	1	Tissue, blood smears		Melanoma
1	Canine	1	Blood specimen	Leptospirosis	Negative
1	Canine	1	Urine specimen	Thallium	Thallium present
1	Canine	1	Blood specimen	Salmonella and brucella	Negative
1	Canine		Tissue examination		Cyst
1	Canine		Vaginal fluid	Culture	Staphylococcus
1	Cavy	2	Rabbits	Culture	Streptococcus, staphylococcus, B. subtilis
1	Cavy	1	Baby rabbit	Culture	Negative
65	Equine	193	Blood specimens	Red blood count, white blood count, hemoglobin, hematocrit	Normal range
1	Equine	17	Blood specimens	Hemoglobin, hematocrit	Normal range
6	Equine	6	Blood specimens	Complete blood count	Normal range
48	Equine	100	Blood specimens	Pregnancy	62 positive 38 negative
10	Equine	11	Cervical swabs	Culture	Negative

Lots	Animals	No.	Material	Condition Suspected	Findings
1	Equine	1	Blood slide	Piroplasmosis	Negative
1	Equine	1	Blood specimen	Bilirubin	Normal range
1	Equine	1	Synovial fluid	Culture	B. subtilis
1	Equine		Cultures	Bacteria	Pseudomonas spp.
1	Equine	1	Swab	Culture	Coagulase positive staphylococcus
1	Equine	1	Fecal specimen	Culture	E. coli
1	Equine	3	Swabs	Culture	Staphylococcus and streptococcus
1	Equine	2	Blood specimens	Salmonella abortivoequina	Negative
4	Equine	4	Swabs	Culture	Staphylococcus
1	Equine	3	Swabs	Culture	Coliform and paracolon
1	Equine		Swabs	Culture	Corynebacterium and streptococcus
1	Equine	1	Swab and scrapping	Bacteria and fungi	Staphylococcus
1	Equine	1	Semen specimen	Culture	Streptococcus, staphylococcus, B. subtilis
1	Equine		Liver, lung, spleen, kidney	Pathogens	Negative
1	Ovine	3	Blood specimens	Calcium, phosphorus	Normal range
1	Ovine	1	Skin scraping	Scabies	Linognathus ovillus
1	Porcine		Lung, liver, kidney, spleen	Pathogens	Viral pneumonia
1	Porcine	1	Blood specimen	Erysipelas	Negative
1	Porcine		Nasal swab	Pathogens	Bordetella bronchiseptica
2	Porcine	4	Blood specimen slides	Complete blood count	Normal range
1	Porcine		Internal organs, blood	Hog cholera	Hog cholera
1	Porcine	1	Blood specimen	Calcium	Normal range
1	Porcine		Gut content	Salmonella	Paracolon
1	Porcine		Brain	Hog cholera	Hog cholera
1	Porcine	6	Blood specimens	White blood count, hemoglobin	Normal range
1	Porcine	2	Blood specimens	Complete blood count	Normal range
1	Antibiotic infusion	5		Culture	4 negative 1 yeast

Sensitivity tests:	1,023
Whiteside tests:	254
Special brucellosis tests:	
Dilute antigen	114
Acidified plate antigen	112
Heat inactivation tests	79

DIVISION OF INFORMATION

Fred W. Jackson, Director

INFORMATION SECTION

Press Service

Press releases were mailed at least once each week to a list of about 375. About 150 of these are daily and weekly newspapers and radio and television stations in New Jersey, New York City and Philadelphia. Much of the balance of the list is composed of farm magazines, commodity publications and food trade journals. The 19 newsmen at the State House, who represent the major wire services and State and metropolitan dailies, are serviced by messenger.

During 1963-64, a total of 236 press releases, concerning Department activities or general news of New Jersey agriculture, was distributed.

In conjunction with this service, more than 1,500 photographs or mats were issued. Division staff members supervised the taking of pictures at many agricultural events and were responsible for their distribution.

Numerous requests from members of the press, for articles, photographs and information on the Department or the State's agriculture were serviced.

The gypsy moth control program, conducted during the spring of 1964, required a special effort to see that residents of the areas concerned were fully informed. Seven press releases were issued prior to and during the period of the spray program. Large mats of maps showing the area to be treated were sent to local newspapers. A daily beeperphone, one-minute advisory on the program was provided to six area radio stations. The reports were telephoned by 4 p.m. to be used during evening broadcasts. The message was repeated three times every hour by one of the cooperating stations.

The announcement that the Department was using Sevin, rather than DDT, as the insecticide for controlling this forest pest, received considerable favorable comment in newspaper columns. This was also true of a story describing the summer program of dropping thousands of traps from airplanes to control the gypsy moth. New Jersey is the first to use this method. In addition to wide local use of the story, two national weekly news magazines carried it in their science columns.

Radio and Television

Fifty-three five-minute "Let's Look at Agriculture" radio programs were produced in cooperation with the Agricultural Communications Office of the College of Agriculture, Rutgers University. Program content included comments by the secretary of agriculture on Garden State agriculture; significant statements excerpted from talks given by conference speakers; news summaries of Department activities; interviews with visiting agricultural delegations; and staff interviews and reports on Department projects. The

programs were produced on a weekly basis and distributed to 18 radio stations in New Jersey, Philadelphia and New York City.

Fifty eight-minute Department of Agriculture segments were produced for the Bill Bennett Farm Show, WCAU-TV, Channel 10, Philadelphia. Many of these consisted of reports by Department staff members on their programs of work. Guests also included farm leaders concerned with New Jersey commodities. Films produced on New Jersey farms by the Public Affairs Department of WCAU-TV were also used on this show. They were thendonated to the Department film library.

Thirty-nine ten-minute TV shows were co-produced and co-hosted with the radio-TV specialist of the College of Agriculture for educational TV station WHYY-TV in Philadelphia. Program content covered all phases of Garden State agriculture. Telecast at Tuesday noon, "Let's Look at Agriculture" was received by many schools in the Delaware Valley.

A half-hour Thanksgiving program entitled "New Jersey's Bountiful Harvest" was telecast at prime time prior to and on Thanksgiving Day by WHYY-TV. The program featured the secretary of agriculture and the dean of the Rutgers College of Agriculture. A dinner display was prepared by Cherry Hill Inn.

New Jersey was host to the 1964 Summer Convention of the National Association of Television and Radio Farm Directors. The conference was held June 22 to 26 with headquarters at Cherry Hill Inn. More than 375 people representing 125 broadcasters and their guests enjoyed tours of South Jersey and Pennsylvania agricultural areas. Hammonton blueberry farms and the Walker-Gordon "Rotolactor" provided particular interest to the visitors from 40 states and Canada. Twenty New Jersey farm organizations contributed to a "Welcome to the Garden State" buffet reception.

Exhibits

The Department's Farmobile was on display at nine New Jersey county fairs during the summer of 1963 and formed the central theme for the Department's exhibit at the New Jersey State Fair. Approximately 25,000 recipe booklets provided by the Department's farm products promotion councils and by other commodity groups were distributed from the Farmobile.

To mark the State's tercentenary year, a new display was prepared for showing during the 1964 season. One projection section of the Farmobile was devoted to a program of historical illustrations and captions presenting the story of New Jersey agriculture "From Ox Cart to Tractor." Eighty drawings made one-third of a century ago, for newspaper syndication, by George Bradshaw of Trenton, were retouched and highlighted with color, and a historical narrative by Dr. Carl R. Woodward was rewritten to adapt the pictorial history to contemporary needs. The Farmobile's adaptation delineates the respective lines of work of the Department and the College of Agriculture and Experiment Station, and also traces the development of agriculture since colonial times. It will be shown at 10 county fairs and the State Fair, and has a potential value for the future.

A new improved observation incubator -- the "New Jersey Peep-Peep Show" -- was designed with advice of the Department's poultry experts, and is being constructed by an exhibits contractor. The old model, which is nearing obsolescence after many years of service, had a plastic hemisphere as an observation dome. The new model has a dome with rectangular planes and the hatching chicks can be better observed by a larger audience. The new model also has a built-in incubator in which eggs may be incubated from the day of setting until ready for hatching in the observation section. This popular educational exhibit symbolizes the Department's poultry and livestock health program.

Special Promotional Activities

Three proclamations by the Governor relating to agriculture were issued. Arrangements for the signing ceremonies, preparation of the official statements, printing and distribution, and information for press, radio and television were handled by this Division. The proclaimed events were:

Animal Health Month in New Jersey
Arbor Day in New Jersey
June Dairy Month in New Jersey.

A red oak, the official State tree, was planted on the State House grounds by the Governor and representatives of organizations promoting arboricultural interests, as part of the Arbor Day ceremonies.

In recognition of the 300th anniversary of New Jersey's origin as a colony, the Division developed and executed a plan for a colossal "birthday cake," to be served by the Governor at the New Jersey Pavilion at New York World's Fair. The project was jointly sponsored by the Department, the New Jersey Agricultural Society, the Poultry Products Promotion Council, and the New Jersey Tercentenary Commission. Publicity was effective, and featured the fact that "300 fresh New Jersey eggs were used in the 300-pound 300th birthday cake."

Farmers Week

Advance, current and follow-up publicity for the more than 40 agricultural groups meeting during the annual New Jersey Farmers Week is a service of the Division. In addition, the information staff has many responsibilities concerned with arrangements for the week.

Fifth-seven press releases were issued in connection with the 1964 Farmers Week and Farm Show. In addition to these general mailings, special articles were prepared at the request of farm magazines and for the publications of various groups interested in individual meetings. Special acknowledgement is made of the generous cooperation of Business Farming which devoted much space in its January issue to advance Farmers Week publicity.

An innovation was the distribution of an abbreviated Farmers Week program, which was published well in advance of the week. Early distribution has proved impossible with the complete program. About 25,000 persons received copies of the eight-page "flyer," which was favorably accepted. The complete program was retained but fewer copies were printed. They were used primarily during Farmers Week itself, rather than distributed for advance publicity.

One hundred and twenty-eight photographs were taken during Farmers Week and prints were mailed to newspapers, magazines and other publications.

A total of 125 five-minute "Hilites of Farmers Week 1964" were produced and mailed special delivery on a daily basis to 25 radio stations. Twenty-five 15-minute documentary reports produced at the end of Farmers Week covered the high spots and commentary by the secretary of agriculture.

Publications

The Division edits and handles the processing details for all printed Department reports, circulars and other publications.

Six issues of Farm Service News are published each year. This four-page illustrated publication, devoted to news of the Department and articles of current interest on New Jersey agriculture, is mailed to approximately 8,500 farm and rural readers in New Jersey.

The following circulars and reports were issued during fiscal 1963-64:

Circular 424 - "New Jersey Agricultural Statistics, 1962"

Circular 425 - "The Blueberry Industry of New Jersey, 1963"

Circular 426 - "List of Licensed Agricultural Dealers, 1963-64"

Circular 427 - "New Jersey Apples and Peaches by Variety, 1963"

Circular 428 - "Laws, Rules and Regulations Governing the Shipment of Nursery Stock Out of New Jersey"

Circular 429 - "Nematodes Associated with Plants in Cultivated Woody Plant Nurseries and Uncultivated Woodland Areas in New Jersey"

Reports - "Highlights of the 48th Annual Report of the New Jersey Department of Agriculture, 1962-63"

- Annual reports for 1963 for 12 soil conservation districts: Burlington County, Camden County, Cape-Atlantic, Hunterdon County, Mercer County, Morris County, Northeast, Ocean County, Salem-Cumberland, Somerset-Union, Sussex County, and Warren County.

Publications prepared in connection with the 1964 New Jersey Farmers Week and Farm Show were:

"Invitation to Farmers Week, 1964"
"1964 Farmers Week and Farm Show Program"
"Highlights of Your Convention, 1964"
"Citations for Distinguished Service fo New Jersey Agriculture, 1964."

The commodity shows premium lists for the 1965 Farm Show were also delivered during the fiscal year.

Milk Industry Studies

The assistant director of information was largely detached from normal duties to continue work with several groups of specialized consultants selected by the secretary of agriculture to study the economics and the marketing problems of the New Jersey milk distribution industry in terms of a directive from Governor Richard J. Hughes to establish a new system of price regulation. In addition to providing resources and information for the specialists, and assisting editorially, the assistant director supervised publication and distribution of a series of six reports, and interpretative summaries for news media.

For security reasons, because premature release of the findings might have jeopardized the position of the Department, the voluminous reports were reproduced internally. This difficult task was performed by the regular secretarial and printing staff whose members cooperated admirably. The work with the consultants required almost daily conferences, meetings and communication with, among other, the agents of the contractor who made studies of costs of milk handling and marketing. Likewise, contacts were maintained with a team of five economists who directed the studies and advised the secretary on conclusions and recommendations, and also with representatives of milk processors and distributors, and of unionized labor, stores, subdealers and producers.

By reference, the published reports of the economists and the management consultants are included here. These became part of the record of the public hearing on State policy for milk industry regulations, and a second hearing to develop a new pricing system for the Office of Milk Industry, which became effective April 1, 1964. The titles of the reports are:

"Alternative Economic Regulatory Programs for the New Jersey Milk Industry"

"An Analysis of the Costs Created in Processing, Distributing and Selling Milk Through Stores in New Jersey"

"An Analysis of Costs of Operating Country Bulk Receiving Stations and A Report of Hauling Rates from Farm to Receiving Station"

"Analysis of the Costs Created in Processing and Loading Onto Trucks Milk That is Packaged in Glass Containers in New Jersey"

"An Analysis of the Costs Created in Processing and Distributing Milk to Schools in New Jersey"

"Cost Reductions from Elimination of Milk Dating."

Of the 3,500 sets of reports reproduced, 1,800 were distributed by the Office of Milk Industry to its licensees in New Jersey, and 950 sets were sent to accommodate special requests of government agencies, the courts, economists in the milk industry and on college staffs, out-of-state milk companies and libraries.

Miscellaneous

A total of 1,639 letters from the general public, seeking information on many phases of New Jersey agriculture, was answered by the clerical staff. An estimated additional 1,000, of less routine nature, were handled by members of the supervisory and technical staff. No count was kept of telephone inquiries, which were also numerous.

NEW JERSEY CROP REPORTING SERVICE

The New Jersey Crop Reporting Service is a joint activity of the New Jersey Department of Agriculture and the Statistical Reporting Service, United States Department of Agriculture. Both the State and Federal Departments have been lawfully authorized to collect and compile information on crop and livestock products and related agricultural subjects. However, they have recognized that the goals of the State and Federal statistical programs can be most efficiently and economically accomplished by combining their efforts.

Federal funds and personnel provide for a basic program of agricultural estimates for the State as a whole, which are comparable with estimates for the 50 states in the nationwide statistical program. State funds and personnel complement and supplement the Federal program by providing for agricultural estimates at the county level and in greater detail than provided for in the National estimating program, particularly for crops important to New Jersey. Also, State funds are matched with Federal Agricultural Marketing Act funds to provide detailed statistics on a variety of specialized agricultural enterprises important to New Jersey such as blueberries, horticultural specialties, and horses.

The New Jersey Crop Reporting Service is presently located in the Federal (Post Office) Building, Trenton, and is staffed as follows:

	Federal	State	Total
Statistician in Charge	1	..	1
Administrative Assistant & Stenographer	1	1	2
Agricultural Statisticians	3	2	5
Statistical Assistant	1	..	1
Clerical	4	1	5
Total	10	4	14

While the agricultural estimating program is conducted by the professional staff, its success depends on the voluntary help of New Jersey's farmers and businessmen. About 6,000 of the State's 13,000 farmers voluntarily answer questionnaires used to obtain basic data for the crop and livestock reports. Approximately one in every five farms provides monthly information on the general crop, dairy, poultry, fruit and vegetable conditions on their individual farms as well as in their localities. The willingness of some of the farmers

to share information with fellow farmers in the State and Nation is remarkable. During the past year 16 in New Jersey were cited for more than 20 years of consistent reporting.

Nearly 400 "agri-businessmen" (fruit and vegetable processors and distributors, hatcherymen, processors of dairy products, poultry, egg and livestock packers, etc.) along with 1,800 feed, fertilizer, fuel, farm equipment, hardware, lumber, clothing and food merchants contribute check data on production and/or prices received and paid by farmers for items used for production and farm family living. Altogether, voluntary reporters returned 26,000 questionnaires used as a basis for the release of over 135,000 mimeographed copies of statistical reports to nearly 8,700 persons and firms in New Jersey.

The professional staff drove 21,000 miles to interview informed persons and to personally observe crop and livestock conditions, and to appear either as a speaker or as a participant at 121 agricultural meetings. They also serviced 1,300 mailed, telephoned and personal requests for special compendiums of agricultural data.

In addition to the mailed surveys, New Jersey was brought into a nationwide program of systematically sampling the use of farmland. Such a statistical program was begun in the 16 southern states in 1956, expanded to the 16 north central states in 1960, and included the 16 northeastern and western states this year. The sample in the newly added states was small, and in New Jersey included only 60 segments of land scattered throughout the State.

Six enumerators were appointed and instructed in the new survey procedures. Each was equipped with aerial photographs of selected land areas and 410 farmers within those areas were interviewed during the last week of May and first week of June to obtain the acreages of crops, numbers of livestock and farm labor used. The basic data were transmitted to the Crop Reporting Board, Washington, D. C. where they were processed in automatic data equipment within the time limits required for the usual program of mailed surveys and reports. Although the sample was small, results of the scientifically selected sample show promise of providing useful and timely data. Proposals for subsequent years call for increasing the size of the sampled area and following up with objective measures of crop yields.

Three special publications of agricultural data, made possible with State and matching State and Federal Agricultural Marketing Act funds, were issued as Department circulars during the year.

Mimeographed publications, in addition to the regular series of monthly reports, were as follows:

"Blueberry Report," November 14, 1963

"Tomato County Estimates," March 15, 1964

"Asparagus County Estimates," March 16, 1964

"Annual Poultry Report," May 4, 1964

"Annual Livestock Summary," May 5, 1964

"Meat Chicken Report," May 14, 1964

"Annual Dairy Report," May 15, 1964

"Blueberry Report," June 16, 1964

The June 16, 1964, "Blueberry Report" represents the first forecast of prospective production for that crop and is one of the few such reports in the Nation on small fruits.

RURAL ADVISORY COUNCIL

The Rural Advisory Council has completed its fifth year as a unit of the Department of Agriculture. The Council is comprised of 12 members who serve without compensation.

During the past year, the following persons ably served as Rural Advisory Council members:

William B. Duryee, Chairman
Phillip Alampi
Dwight M. Babbitt
Mrs. Robert B. Crane
Clayton S. Cronkright
William Flemer, III
David J. Goldberg
William A. Haffert, Jr.
Dr. Leland G. Merrill, Jr.
Franklin C. Nixon
Frank C. Pettit
Vacancy

The New Jersey Department of Agriculture provides the necessary appropriations for the programs, activities and operation of the Council.

Study Projects

The first portion of this annual report will review several study projects that were sponsored or undertaken by the Council during the year. Other projects, of a more specific nature, are reviewed in the second portion of the report.

County Boards of Agriculture

This study, dealing with the role, organization and relationships of the County Boards of Agriculture, was completed during the year. Members of the special committee which conducted the study are:

Dr. Frank App, Consultant
Phillip Alampi
Dr. Firman E. Bear
Michael J. Klein
Clement B. Lewis
Steffen Olsen
Louis J. Sanguinetti
Howard M. Sheppard
Clifford E. Snyder
Charles A. Thompson
Lloyd B. Wescott

The County Boards of Agriculture have been and continue as a major force in organized agriculture in New Jersey. Through their rather complex

relationship with the State Board of Agriculture, the Rutgers University College of Agriculture and the New Jersey Farm Bureau, they have served agriculture and the rural community well. But in light of the economic and social changes affecting agriculture, whether from the impact of urbanization or the technological changes in farming, there appears to be need to reexamine their role, operation and responsibilities.

The study examines some of the changes now occurring and draws some basic conclusions and recommendations for the County Boards. It is hoped the study results will serve as a basis for greater understanding of the need for both sound programming and organization of County Boards of Agriculture as they continue their essential and productive role in the years to come.

The study committee's report will be published and released to the individual County Boards of Agriculture. Then follow-up regional meetings will be held to review in detail the contents of the report with the Boards. This will be accomplished in conjunction with the State Board of Agriculture, the College of Agriculture and the New Jersey Farm Bureau, all of which are vitally involved with the County Boards of Agriculture.

Blueprint for New Jersey Agriculture

During the past year, a continuing evaluation has been made of a procedure to accomplish an overall study of New Jersey agriculture --- its needs, problems, potentials and goals for the future. After much examination, it was decided that the type of evaluation and program needed could not be accomplished by a single study consultant. Rather, a study so vital, diverse and inclusive needed the participation and support of those who ultimately would be involved in actions resulting from the study; namely, the agricultural organizations, agencies, institutions and individuals of the State.

For this reason, the study is now being developed along these broad lines of scope and organization. The Rural Advisory Council will support the study through staff services and consultant work. Agricultural interests and organizations will actually accomplish the study with the guidance of area specialists. It is expected that this involvement of many persons will assist in the fulfillment of needs and recommendations stemming from the blueprint.

Farmland Assessment Program

Although no special studies were undertaken this year in regard to farmland assessment, (note 1963 annual report on special studies of agricultural taxation in New Jersey), it was thought essential to review the new farmland assessment program because of the participation of the Council in its development and implementation.

Last November 5, the voters of the State approved a Constitutional Amendment providing for the assessment of farmland on the basis of its agricultural or horticultural productivity. With this directive, the Governor's Farmland Assessment Committee, instrumental in developing the amendment, proceeded to draft implementing legislation for the program. Senator John A. Waddington served as chairman of the committee.

Concurrently, the New Jersey Farm Bureau-State Grange Tax Study Committee also developed the most appropriate implementing legislation. Final agreement was reached, legislation was introduced and passed in the Legislature and signed into law by Governor Richard J. Hughes on May 11, 1964.

The next step was to work with the director of the Division of Taxation to formulate suitable rules and regulations to guide local assessors in implementing the program.

Also, a special Farmland Evaluation Advisory Committee, established by law, went into operation to provide appropriate ranges of farmland values for use by local assessors. This committee is comprised of the secretary of agriculture, dean of the College of Agriculture and the director of the Division of Taxation.

Thus, by October 1, 1964, the law will be fully in effect for the 1965 tax year. This is the culmination of a tremendous effort on the part of all in agriculture to gain a desirable program for the benefit of agriculture in New Jersey.

Other Projects

The second portion of this annual report presents highlights of special activities of the Rural Advisory Council and its staff.

Vocational Education in New Jersey

With an expanded Federal program of assistance to vocational education and the realization of a need for more of this type of education for the youth of New Jersey, a committee to study the needs of vocational education was established by the commissioner of education.

The secretary of agriculture, a member of this committee, was assisted by the Rural Advisory Council staff in developing a report and recommendations. Great assistance in this endeavor was provided by a number of agricultural organizations and individuals.

One noteworthy item is that the Federal legislation broadened the definition of vocational agriculture from basically an on-farm orientation to a concept that embraced related agricultural businesses and interests. This should materially increase the scope and educational opportunity for those students who wish to remain in the sphere of agriculture yet may not be directly involved in farming.

Statewide Planning Program

The executive secretary of the Rural Advisory Council serves as the Department's representative on the Interdepartmental Committee for State Planning. The purpose of the committee is to work with the Division of State and Regional Planning in the preparation of a comprehensive guide plan for the future development of the State. During the past year, an evaluation of the population and economy of New Jersey was accomplished. Part of this study dealt

with agriculture and land use. Close working relationships are maintained with this program since planning programs will have a vital role in the future of agriculture in New Jersey.

Rural Area Development

The staff of the Council maintains close cooperation with the Federal and State Rural Area Development and Area Redevelopment programs. These programs are concerned with a variety of State and Federal activities oriented toward the economic development and social improvement of many rural areas. The range of services available include training and educational programs, business and industrial loans, technical assistance and study programs. Also, with increased Federal participation in economic development and opportunity, the role of rural development and its related organizations will become increasingly active.

Miscellaneous Activities

The Council staff maintains working relationships with numerous organizations and agencies. Such liaison materially assists in resolving particular difficulties that arise from time to time. A continuous flow of individual problems ranging from rural planning and zoning to health and nuisance regulations are directed to the staff of the Council. Many of these are transferred to more appropriate units of State government, although many are handled directly by the staff. The flow of problems, though, does much to keep the Council oriented to topics of current interest as well as the major areas involved. Major problems are brought before the Council for an evaluation of the desirability to initiate special study programs. Thus, the Council fulfills its required mandate to study and make recommendations on rural social and economic affairs.

STATE SOIL CONSERVATION COMMITTEE

Summary of 1963-64 Program Accomplishments

The soil conservation program continued to make gains during the 1963-64 fiscal year. Application of conservation practices on farms and woodlots was maintained at the high level established over the past several years. Consultant services on soil and water problems with representatives of State, county and municipal governments and with urban landowners increased five times the number of the previous year.

An additional 122,939 acres of land were mapped under the new soil survey procedures, and soils maps covering 118,086 acres which were mapped originally prepared in the 1930's were converted to the modern survey.

All 14 soil conservation districts updated their long-range plans of operation, basing them on the projected soil and water needs of the next 10 years. At the same time, the districts modernized their memorandums of understanding with the United States Department of Agriculture.

In the watershed program, one project --- the Pine Mount-Mill Creek in Cumberland County --- was completed. The work plan for the Assunpink

project in Mercer and Monmouth counties was prepared and approved by the local sponsors. Four other projects were under construction and seven new project applications have been received and are currently under preliminary investigation.

In addition, the State Soil Conservation Committee was instrumental this year in getting the State Department of Conservation and Economic Development to establish a beach grass nursery as a part of its beach erosion control program. Similarly, the Committee and districts were successful in bringing the new United States Department of Agriculture Plant Materials Center for Coastal Plain Soils to New Jersey. The State Committee also maintained close liaison with other governmental agencies and had representation on numerous conservation boards and committees.

Technical assistance for the district programs was continued at last year's level by the United States Soil Conservation Service, the Forest Management Section of the Department of Conservation and Economic Development, the College of Agriculture and the Cooperative Extension Service, Rutgers University.

The New Jersey Department of Agriculture, through the State Soil Conservation Committee, provided the major share of the funds for the program and these were supplemented at the local level by voluntary contributions from landowners.

Background

It is the purpose of this report to place in perspective some of the more important events, activities and trends which took place during the year. To do so, it is first necessary to know something of the soil conservation program objectives and its operating pattern.

Objectives

The State Soil Conservation Committee is a special-purpose conservation agency established by an Act of the Legislature in 1937 to provide for: the advancement of soil conservation, the control and prevention of soil erosion, and the creation of local soil conservation districts.

In 1959 it was assigned by legislation to the New Jersey Department of Agriculture and its objectives were broadened to include: the prevention of damage to soil and soil resources by flood waters or sediment and the furtherance of conservation of water for agricultural purposes.

Operating Pattern

Basically, the program has four integral parts. Each contributes a share to the success of the program and can be described as follows:

(1) The State Soil Conservation Committee administers the program at the State level; creates districts; appoints and sets the terms of office of a board of three supervisors who are local

resident landowners to serve as the governing body of each district; assists each district in promoting its program; arranges for technical services and materials from local, State and Federal agencies; allocates to the districts State-appropriated funds; coordinates the activities of the several districts and aids in such other ways as may be appropriate.

(2) The Soil Conservation Districts, which are created by the State Soil Conservation Committee as legal subdivisions of the State, administer the program at the local level and formulate comprehensive plans and procedures for controlling and preventing damage to local soil and water resources. They carry out their programs by utilizing funds and technical assistance provided to them by cooperating agencies and the State.

(3) The Cooperating Agencies and Organizations supply the district with funds, materials and technical assistance for accomplishing the district's program.

(4) The Landowners may be Federal, State, county, municipal agencies or private property holders who voluntarily agree to cooperate with the district by applying the needed conservation practices to their lands.

Changes and Trends

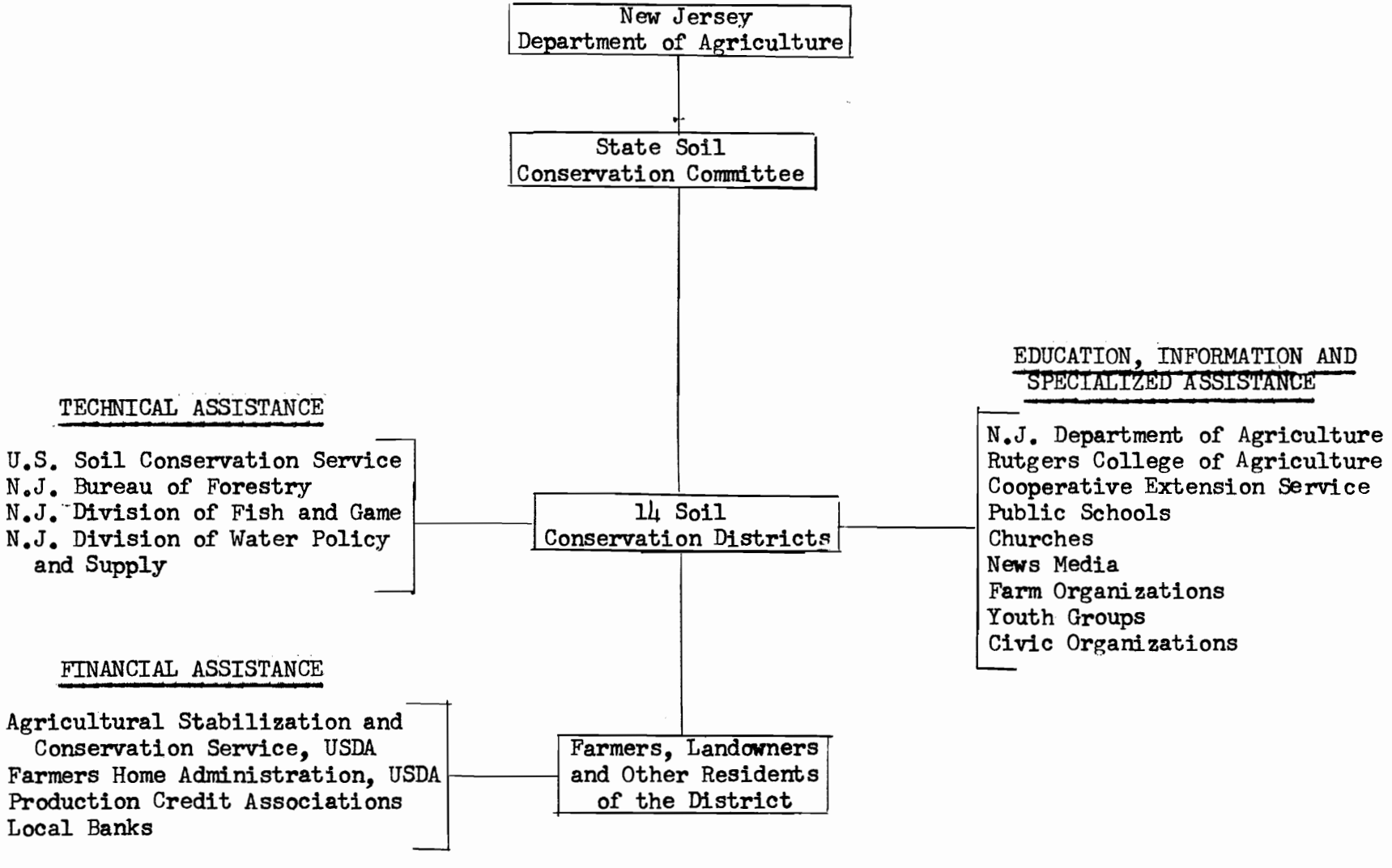
Much of this year's activity has been devoted to modernizing the program to meet the actual and anticipated changes in land use, population shifts and economic factors. The following sections deal with the analysis of these trends and changes together with the steps undertaken to counterbalance them.

Agricultural Lands

The Census of Agriculture shows that over the past several years there has been an annual reduction in the number of farms but the average acreage of the remaining farms has increased. The same trend is also reflected in the districts' conservation work load. For example, in 1959, the districts worked with 9,000 cooperating farms which totaled less than one million acres. This year the number of cooperators was down to 8,498, but the farms totaled 1,012,310 acres.

This number decrease and size increase can again be seen in the conservation farm planning statistics. In 1962, 5,573 farms totaling 546,210 acres had farm plans; in 1964, there were only 4,980 farms with plans, but they totaled 557,768 acres.

Coinciding with this trend is another which shows that the farms remaining in agricultural production move to a more intensive conservation management program. This can be seen from the table on page 15 which gives conservation accomplishment statistics covering the fiscal years of 1959-1964.



SOIL CONSERVATION PROGRAM TABLE OF ORGANIZATION

Practice	1959-60	1960-61	1961-62	1962-63	1963-64	Unit	Totals
New cooperators	569	545	577	509	425	number	2,625
Basic plans	391	373	358	423	302	number	1,847
Revision of old plans	42	42	78	60	84	number	306
Farms serviced	3,600	3,600	4,612	4,378	4,903	number	21,093
Ponds constructed	176	148	160	269	250	number	1,003
Open drains	53	52.6	70.3	65.29	41.58	miles	282.77
Tile drains	32	33.5	36.6	37.71	18.1	miles	157.91
Land drained	2,500	2,549	3,521	9,266	2,639	acres	20,475
Land smoothing	none	329	450	598	393	acres	1,770
Terracing	27.8	26.4	24.0	15.05	17.2	miles	110.45
Strip Cropping	1,746	2,370	1,764	1,668	1,760	acres	9,308
Contour plowing	2,032	2,287	1,671	1,429	2,129	acres	9,548
Windbreaks	7	4.3	8.9	9.3	9.59	miles	39.09
Wildlife area improvement	214	1,575	878	2,567	3,789	acres	9,023
Ponds stocked	228	150	203	306	197	number	1,084
Tree planting	244	284	330	396	428	acres	1,682
Dikes and levees	1.5	1.1	2.5	11.1	5.34	miles	21.54
Outlets	12.0	10.3	9.5	.82	4.29	miles	36.91

(The planning, layout and supervision of construction of these practices were accomplished by the soil technicians furnished by the United States Soil Conservation Service.)

Nonagricultural Lands

The greatest change in the program has been in the area of work with nonagricultural landowners. In 1959 an experimental project was initiated in one district. Technical services were offered to State, county and municipal governments in an effort to "combat the detrimental effects of urban development on soil and water resources."

By 1962 the program had expanded to include all nonagricultural lands --- public and private --- and each of the 14 districts was participating.

How successful this program has been can be seen from its growth statistics. For example, in 1959 less than 100 conservation plans were prepared for nonagricultural tracts of land; by 1962, plans were drawn for 238 tracts totaling 50,068 acres. This year the number increased to 538 plans on 55,028 acres.

The problems involved on these lands are often complex and entail political, economic and social decisions which must be made by the government bodies owning or controlling the land. In such cases the districts consult with the agency concerned but do not prepare a complete plan. These consultation services are varied and include such items as: interpretation of soil survey data, beach erosion control, water management projects and supplying basic resource data for land development.

Requests for consultation services have been steadily increasing and grow in direct proportion to the speed with which the districts inform others of the services they have to offer. For example, in 1962 the districts processed 830 requests for consultation services. This year the figure swelled to 4,243 --- a fivefold or 400 per cent increase.

The districts and State Committee are of the opinion that this phase of the program --- working with nonagricultural landowners --- will annually contribute an increasing amount to the districts' work load. They are also of the opinion that the potential good which can come from this program --- of supplying and interpreting basic resource data for governmental units --- will result in better utilization of the State's natural resources.

Farm Woodlots and Forest Lands

Approximately 46 per cent or 2,229,000 acres of the total land area of the State is forests. Of this, 88 per cent or 1,961,520 acres is privately owned woodland. The value of the timber on most of these lands could be markedly improved by the application of scientific forest management practices.

The soil conservation districts are actively cooperating with the State Forestry Bureau in promoting their managment program for these private forest lands.

The following summary of accomplishments, covering the period from 1962 to 1964 and reported by the Forest Management Section, State Department of Conservation and Economic Development, shows a trend toward acceptance of these practices.

	1962-63	1963-64	
Requests for assistance	1,176	1,285	
Management assistance given woodland owners:			
Area involved	25,267	29,281	acres
Timber marked for cutting			
Area	1,763	2,602	acres
Sawtimber	2,322,800	1,948,900	board feet
Small timber products	4,320	6,764	cords
Managment plans			
Plans prepared	101	232	
Area involved	14,520	16,561	acres
Planting plans made	737	751	acres
Improved management practices followed by woodland owners:			
Number	380	395	
Timber harvested	1,397	1,771	acres
Number of timber stands improved	452	221	
Young timber saved from premature harvest	2,000	2,792	acres
Area planted	650	582	acres
Products harvested under improved management practices	4,728	7,843	acres
Sawtimer	1,908,600	2,818,400	board feet
Small timber products	3,361	2,419	cords

Updating Long-range Plans of Operation

In keeping with these trends each district has prepared a new long-range plan of operation which outlines in general terms the nature of the problems anticipated in the next 10 years and how they can be solved.

New Memorandums of Understanding

Technical assistance is provided to the soil conservation districts by the State Forest Management Section and the United States Soil Conservation Service through a document entitled a "Memorandum of Understanding."

Two years ago the Forestry-District Agreement was updated and this year the United States Department of Agriculture-District Agreement was modernized.

In signing the new agreements, Orville L. Freeman, United States Secretary of Agriculture, stated that:

> "I want to commend the governing body of your District for their progressive action in updating the soil and water conservation program and modernizing the memorandum of understanding with the U.S. Department of Agriculture. This is an important initial step in helping private landowners move forward more effectively with their resource conservation and development effort.
>
> The district movement has gained enormous strength over the past quarter century because you and other dedicated men have given freely of your time, energy, and imagination in the finest tradition of democratic action and self government.
>
> We are on the threshold of a new era in the management of our resources -- of land and water, forest and wildlife -- by our people. I am convinced that your District has an important part to play in giving reality to our broadened concepts of conservation and rural areas development. I urge you to push forward in every way you can conceive to achieve maximum advancement in the conservation and economic development of our soil and water resources within your District.
>
> I assure you of the Department's readiness to cooperate with you to the full extent of its ability."

Public Law 566 Watershed Projects

The watershed program combines the resources of the State, Federal and local governments with those of private landowners in solving mutual problems of flood control, agricultural water management and recreation. In 1959 there were seven qualified applications for watershed projects in New Jersey; today there are 30 --- seven of shich were added this year.

Four projects are completed: the Pequest in Warren and Sussex counties; the Silver Lake-Locust Island and Town Bank projects, both in Salem County; and the Pine Mount-Mill Creek in Cumberland County.

Work plans are complete and construction has started on:

1. Paulins Kill --- Warren and Sussex counties
2. Stony Brook --- Mercer and Hunterdon counties
3. Maurice River Cove --- Cumberland County
4. Repaupo Creek --- Gloucester County

The work plan for the Assunpink Creek in Monmouth and Mercer counties is complete and has been sent to the House of Representatives' Committee on Agriculture for approval. The flood prevention and drainage portions of the work plan on the Parkers Creek Watershed in Burlington County are complete and work is underway on the recreational phase of the plan. On the Manalapan Brook in Monmouth and Middlesex counties, planning is underway.

Preliminary investigations are underway on:

1. Salem River --- Salem County
2. Oldsman Creek --- Salem and Gloucester counties
3. Riggins Ditch --- Cumberland County
4. Upper Millstone River --- Monmouth, Mercer and Middlesex counties
5. Maple Creek --- Cumberland County
6. Furnace Brook --- Warren County

Surveys are pending on:

1. Manantico --- Atlantic and Cumberland counties
2. Navesink --- Monmouth County
3. Bear Creek --- Warren and Sussex counties
4. Dennis Creek-Bidwells Ditch --- Cape May County
5. Shabacong --- Warren County

Eight other projects are considered to be inactive because they lack sufficient local interest or funds at the present time.

In order for a project to qualify for assistance under P.L. 566, surveys must show that there will be at least one dollar benefit for each dollar of cost. Most of the projects listed here show a much higher benefit to cost ratio --- generally two to one. Although the combined monetary benefits of the 23 projects have not yet been determined, estimates on the cost of 10 of them have been made.

The figures show that 10 million dollars will be required. The Federal Government is allocating $6\frac{1}{2}$ million and the local people will pay $3\frac{1}{2}$ million. Farmers are contributing about one-half of the local share. Farmer, suburbanite and city dweller will all share in the benefits of flood protection and prevention, water management and recreation.

Research

In 1963 the State Soil Conservation Committee joined with the New Jersey Department of Health, the New Jersey Department of Conservation and Economic Development and the United States Geological Survey in a water quality program.

The cooperative program is divided into two projects. The first deals with a reconnaissance survey of surface water quality in the State. It includes summarizing and reporting on the available knowledge of the water quality of streams throughout New Jersey. The project has been completed and the results published in Public Health News.

The second project deals with the establishment of a basic water quality network. Collection of detailed data was begun in the fall at more than 30 sites on New Jersey streams. This network will provide a source of continuing impartial information on stream quality and its variation with season, streamflow and other natural and man-made factors.

Collection of data continued during the year on the research project undertaken cooperatively with the United States Geological Survey, Princeton University, the Stony Brook-Millstone Watershed Association and the Division of Water Policy and Supply of the New Jersey Department of Conservation and Economic Development.

The purpose of the project is to evaluate the capability of conservation land treatment to reduce the sedimentation and storm runoff in small watersheds.

The study was also designed to measure the effects of several silt retention reservoirs on decreasing sediment yields from the upper 44.5 square miles of the Stony Brook Watershed.

An interim report entitled, "Sedimentation in the Stony Brook Basin, New Jersey, 1956-59," has been issued.

Appointment of Supervisors

Acting upon the recommendations of the county boards of agriculture, the State Committee reappointed 12 supervisors and selected two new replacements. Their terms of office commenced July 1, 1964, and will continue through June 30, 1967.

State Committee members are:

Phillip Alampi
Alfred F. Baylor
Dr. Firman E. Bear
Jacob A. Blakeslee
Frank S. Coles
Dr. John L. Gerwig
Dr. Leland G. Merrill, Jr.
Charles Q. Oldis
H. Earl Propst
Selden L. Tinsley
Fred H. Totten
John R. Traino
Robert A. Roe

The Committee held eight meetings during the fiscal year 1963-64. Six of the meetings were held in the Board Room of the Department of Agriculture; one in Adelphia at the Rutgers College of Agriculture Research Center; and one in Princeton in conjunction with the Mid-Atlantic meeting of State Soil Conservation Committees and Commissions.

DIVISION OF MARKETS

Francis A. Raymaley, Director

DAIRY SERVICE

Milk Flavor Study

During the first six months of this year work on the study of the effect of various production, processing, and distribution practices on milk flavor was continued. In January staff activity was reduced to liaison with this study. In April the normal work detail was transferred to the Office of Milk Industry.

Bulk Tank Weighing and Sampling

Assistance was provided at a special school of instruction for milk truck drivers. The drivers were taught methods for proper recording of weights and techniques for sampling at farm bulk tanks. Inasmuch as this routine chore in handling milk from producer to customer involves weights and measures and licensing and bonding, the procedures called for an upgrading of the driver's job.

Livestock Auction Markets

Again in the current year the eight livestock auctions throughout the State supplied weekly reports of all sales, giving number and class of all animals sold and prices obtained. It can be noted that both the number of head and dollar value declined further during the past year.

SUMMARY OF SALES AT LIVESTOCK AUCTION MARKETS

Market	No. Animals 1962-63	No. Animals 1963-64	Value 1962-63	Value 1963-64
Flemington	14,803	13,834	$ 627,335.97	$ 521,544.32
Hackettstown	54,674	53,124	4,081,751.06	3,905,990.02
Mount Holly	4,206	4,390	120,937.78	122,239.55
Freehold	2,781	2,428	167,978.19	130,239.30
Sussex	42,264	40,114	2,764,952.44	2,453,203.04
Woodstown (Harris)	26,752	25,416	1,540,715.50	1,385,970.00
Community (Woodstown)	7,888	7,397	527,282.20	469,081.59
Columbus (Tallman)	14,880	13,280	911,030.56	714,558.09
Totals	168,248	159,983	$10,741,983.70	$9,702,825.91
1961-62 Total	173,289			$10,779,662.51

Miscellaneous

The supervisor attended several meetings and conferences at Hyattsville, Maryland, at which representatives of the United States Department

of Agriculture and several northeastern states collaborated in the writing of definitive grades of replacement cattle. There is considerable interest in this subject over a wider area than the Northeast. But to date not all states are as advanced in the development of this project as are, for example, New Jersey, Virginia and Pennsylvania.

Effective April 1, 1964, the supervisor of dairy products standardization was transferred to become agricultural marketing reporter. Despite this transfer, he maintained liaison on all existing projects until essential work shifts were completed on these duties.

BUREAU OF FRUIT AND VEGETABLE SERVICE

The principal role of the Bureau of Fruit and Vegetable Service is to assist the industry in marketing its products in an orderly and efficient manner. Inspection and certification of fresh fruits and vegetables and the grading of raw products for processing are supervised by the Bureau. Of major importance is the service performed at processing plants where each grower's raw product delivery is classified as to the percentage meeting the various grades and/or contract specifications.

The volume of fresh market inspections is affected by such factors as production, quality, prices and marketing regulations. During this fiscal year 1,655 lots, consisting of 677,014 packages of produce destined for fresh market consumption, were inspected for grade. This was a decrease of 48 per cent in the number of inspections and a decrease of 35 per cent in volume from last year. The decrease was primarily due to a reduction in potato inspections. The volume of inspections increased for apples, sweet corn, peaches, lettuce and other commodities.

Inspection of products moving into processing channels totaled 233,378 tons compared with 283,601 tons last year and 255,243 tons the year before.

The Bureau continued to provide technical assistance to New Jersey commodity councils and committees representing the asparagus, apple, white potato, sweet potato and cultivated blueberry industries.

The Bureau also cooperated in the operation of the program of Jersey Certified Farm Markets, Inc. An employee was assigned on a full-time basis from June 1 to September 15 to work in an advisory capacity with this organization and other roadside market operators.

The Bureau also provided technical advisory assistance to fruit and vegetable auctions, agricultural organizations and buying agencies.

During the fiscal year 72 Federal-State fruit and vegetable inspectors licensed by the United States Department of Agriculture were required to handle the inspection and grading of commodities for fresh market and processing.

Certifying Fresh Products

Apples

Although production was below average, the quality of the apple crop was good. Apples held in controlled atmosphere storages were in exceptionally fine condition up through May and June.

The volume of apples inspected this fiscal year was about 35 per cent more than last. A total of 98,697 bushels was inspected compared with 64,020 last year. Of the total amount inspected, 85 per cent was certified for export. Favorable conditions in South America contributed to the increase in export buying.

White Potatoes

Generally good growing and harvesting weather produced a fine crop of potatoes. The average yield per acre was 250 hundredweight equivalents compared with 255 hundredweight last year.

A total of 802 lots consisting of 228,674 hundredweight equivalents was inspected, compared with 2,164 lots totaling 605,586 hundredweights last year. Of the total volume inspected, 98 per cent graded U.S. No. 1, Size A, or better. As a result of the high quality produced, receivers of New Jersey potatoes asked for inspection less frequently than the previous crop year. Records show that less than 5 per cent of the crop was inspected compared with 14 per cent last year.

Sweet Corn

The Cooperative Growers' Association of Beverly again requested the services of the Bureau for inspection of sweet corn.

Growers' lots totaling 97,121 crates were inspected and the results made available to the sales personnel. The certification of sweet corn is part of the orderly marketing program of the cooperative.

In addition, inspectors from the Bridgeton and Hightstown offices certified 14 lots of sweet corn containing 5,076 crates. Most of these shipments were purchased by the Defense Subsistence Supply Center for domestic military installations.

Peaches

The Gloucester County Agricultural Cooperative Association, Inc., Glassboro, again requested the full-time services of two Federal-State inspectors for peaches shipped under their special sales program. In addition to inspecting peaches to be shipped, the inspectors assisted grower members in improving their packing and grading operations.

A summary of the 1963 peach season reveals that peach inspections were higher this year than any previous year on record.

The inspectors assigned to the Gloucester County Agricultural Co-operative Association certified 92 shipments of peaches which included 40,988 3/4-bushel containers and 1,503 bushel baskets. All graded U.S. Extra No. 1, except two lots containing 366 3/4-bushel containers which graded U.S. No. 1. These figures include 15 lots containing 5,428 3/4-bushel containers purchased for military establishments by the Government and one lot of 650 bushel baskets for export to Canada.

Inspectors from the Bridgeton office inspected 65 lots containing 12,539 3/4-bushel containers and 5,161 bushel baskets. This includes 53 lots consisting of 9,240 3/4-bushels and 5,161 bushels which were exported to Canada.

Lettuce

The volume of lettuce inspected this fiscal year was 12 per cent greater than last. One hundred and seventy-four lots totaling 83,701 containers were certified, compared with 166 lots consisting of 73,863 containers in 1962-63. All packages contained 24 heads each.

Practically all of the volume inspected was purchased by the Defense Subsistence Supply Center for distribution to various military installations --- both domestic and foreign. A small amount was exported to Canada.

The Bridgeton office again provided space for buyers of the Defense Subsistence Supply Center. This service makes it more convenient for South Jersey growers and brokers to arrange sales with the military buyers.

Cannery Crops

Asparagus and tomatoes are the two most important crops grown for processing. A considerable volume of carrots, snap beans, red and green sweet peppers, and green tomatoes is also graded. Occasional requests are received for inspection of trucklot shipments of apples, sweet potatoes, blueberries and other commodities for processing.

Products for processing are graded on the basis of processor-grower contracts which usually incorporate Federal or State standards. Inspectors analyze a representative sample from each load and record the results on an official certificate. Grading provides an equitable basis for payment for both processor and grower and is an inducement for growers to deliver higher quality.

Asparagus

Grading asparagus for processing is the largest single grading activity of the Bureau. During the spring of 1964, five processors and eight brokers operated 20 receiving stations in the producing areas. Thirty inspectors and two supervisors were required to handle the grading.

California is the only state that surpasses New Jersey in the production of asparagus. The estimated acreage for harvest in New Jersey this year was 29,100 acres compared with 28,500 acres in 1963. Approximately two-thirds of the total acreage was estimated to be for processing.

This season the contract price for N.J. No. 1 spears, 7 inches in length, 4 1/2 inches minimum green color, 3/8-inch minimum diameter measured at the butt, was 11.5 cents per pound. Last year the contract price for the same specifications was 12.5 cents per pound. Most of the volume was purchased in accordance with these specifications known as the "regular contract."

Three other contracts were used this season, two of which contained no particular reference to standards but specified maximum length and minimum diameter of spears.

Adverse weather conditions prevailed throughout the harvesting season. The early part of the season was wet and cold. The balance of the season was extremely dry and plagued by intermittent periods of excessively hot and cool weather.

Volume graded under all contracts this season was about 12 per cent below last year. Total 1963 volume was 51,161,530 pounds compared with 58,104,190 pounds graded in 1962.

This season 40,644,038 pounds or about 70 per cent of the season's total were graded under the regular contract specifications. Grades averaged 72 per cent N.J. No. 1, 6 per cent culls and 22 per cent butts. In 1963 the averages were 73 per cent N.J. No. 1, 6 per cent culls and 21 per cent butts.

Volume graded on the basis of a 7-inch spear, 5 inches green color, was 9,479,302 pounds with averages of 67 per cent N.J. No. 1, 6 per cent culls and 27 per cent butts.

On the basis of the processor-grower contract specifying a 10-inch spear, 901,408 pounds were graded with 82 per cent pay weight, 1 per cent culls and 17 per cent butts. Volume graded on the contract calling for a 9 1/2-inch spear was 136,782 pounds with 90 per cent pay weight and 10 per cent butts.

Tomatoes

In 1963 New Jersey ranked fourth in the nation in the production of tomatoes for processing, preceded only by California, Ohio and Indiana. For the most part, weather conditions were favorable for good production and quality.

The 15,000 acres in New Jersey in 1963 was down from 18,200 acres in 1962. The average yield per acre this season was 17.0 tons as compared with the yield per acre record of 20.5 tons in 1962.

Volume graded this season was 201,083 tons with grade averages of 68 per cent U.S. No. 1, 30 per cent U.S. No. 2 and 2 per cent culls. In 1962 the volume was 246,258 tons with averages of 66 per cent U.S. No. 1, 32 per cent U.S. No. 2 and 2 per cent culls.

At the peak of the season 27 inspectors were assigned to tomato grading for six processors and one broker.

SUMMARY 1963 CANNERY TOMATO SEASON AND COMPARISON WITH PREVIOUS 10 YEARS

Seasons	Total Tons Graded	U. S. No. 1 (per cent)	U. S. No 2 (per cent)	Culls (per cent)
1953	192,623	66	32	2
1954	130,462	62	36	2
1955	36,705	47	49	4
1956	157,464	64	33	3
1957	144,196	69	29	2
1958	150,659	64	34	2
1959	129,424	60	37	3
1960	202,154	63	34	3
1961	221,824	65	32	3
1962	246,258	66	32	2
1963	201,083	68	30	2

Other Cannery Crops

Requests are received annually for grading other important crops for processing. Following is the quantity in pounds of each graded product for the past two seasons.

1963-1964		1962-1963	
Carrots	7,675,900	Carrots	12,264,550
Snap beans	1,304,400	Snap beans	1,636,520
Sweet peppers	3,510,300	Sweet peppers	1,696,290
Green tomatoes	937,950	Green tomatoes	985,750

Shipping Point and Miscellaneous Inspections

In addition to the commodities covered in detail in this report, others, such as asparagus, beets, cabbage, cucumbers, onions and peppers, were inspected and certified for fresh market shipment or for processing. Inspections on miscellaneous products this year totaled 420 shipments containing 108,320 packages.

Since 1960, one inspector has been assigned to the P. J. Ritter Co., Bridgeton, to inspect and certify processed asparagus packed in accordance with the New Jersey Seal of Quality specifications. The volume certified this year under the seal was 91,721 cases of 12 13-ounce glass jars and 8,437 cases of 24 13-ounce jars, making a total of 100,158 cases containing 1,303,140 jars. Last year's pack totaled 159,666 cases containing 2,241,504 13-ounce jars.

For the fourth consecutive year, the Bureau cooperated with Campbell Soup Co., Camden, and the United States Department of Agriculture in a research program devoted to obtaining data on an improved method of grading tomatoes for processing. The new grading procedure involves the use of an electronic instrument known as the U.S.D.A. Colorimeter which provides an accurate objective measurement of the color of raw juice in terms of a color index. The colorimeter replaces visual color evaluation. In addition, tomatoes are graded for

defects only into four categories, A, B, C and culls, depending upon the amount and kind of defects present.

TEN-YEAR RECORD OF SHIPPING POINT INSPECTIONS BY PRODUCTS

	54-55	55-56	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64
Apples	369	150	191	336	107	241	138	243	156	134
Asparagus	24	14	32	6	1	1	1	42	47	72
Beans	..	..	..	..	1	..	..	..	..	1
Beets	..	..	..	1	4	2	3	..	1	8
Blueberries	..	..	..	..	..	..	31	..	..	..
Cabbage	1	6	6	8	10	21	22	11	48	62
Cantaloups	..	..	..	..	..	..	..	..	2	..
Carrots	1	..	10	..	..	1	..	..	..	10
Celery	..	..	..	..	1	..	..	..	..	..
Chicory	..	..	..	..	..	2	..	..	..	..
Collards	..	..	..	2	..	..	..	..	..	..
Corn	91	33	35	17	26	36	187	239	232	38
Cranberries	..	..	..	..	..	..	..	19	37	1
Cucumbers	1	5	..	7	2	14	6	4	8	7
Eggplant	..	..	..	..	..	1	..	..	..	25
Endive	..	..	..	..	..	..	..	..	..	17
Escarole	..	..	..	..	..	1	..	..	..	19
Lettuce	5	1	36	14	48	49	79	116	166	174
Onions	28	15	9	6	14	10	..	8	9	12
Onions, green	..	..	..	..	..	5	..	..	..	33
Parsley	..	..	..	..	..	..	..	..	..	26
Parsnips	..	..	..	..	..	..	..	..	..	12
Peaches	8	1	2	..	4	13	31	85	140	157
Peppers	..	..	..	3	..	10	3	14	13	49
Potatoes	632	493	1,858	3,007	3,109	3,079	2,251	3,092	2,164	802
Pumpkins	..	..	..	..	..	..	..	..	..	3
Romaine	..	..	..	..	..	..	..	..	..	6
Rutabagas	..	1	..	..	..	..	..	2	..	..
Squash	..	..	..	..	..	..	1	..	9	32
Sweet potatoes	9	33	2	1	1	108	18	..	127	12
Tomatoes	..	..	12	10	..	..	7	2	..	6
Turnips	..	..	..	..	..	..	1	1	..	7
Mixed vegetables	3	2	2	..	..	16	..	5	..	[1]
Totals	1,172	754	2,195	3,418	3,328	3,610	2,779	3,883	3,159	1,725

[1] All commodities have been itemized.

Terminal Inspections

Terminal inspections are also an important part of the Bureau's activities. At the request of receivers, inspections are made on products

shipped to New Jersey terminals in interstate commerce. The majority of applications received are for potato inspections. Inspections made for hospitals and institutions are classified under terminal work. Most of this work is on fresh supplies purchased by the Trenton and Marlboro State Hospitals.

Only inspectors appointed by the United States Department of Agriculture as collaborators can make terminal inspections. The Bureau chief, three State supervisors and three Agricultural Society inspectors are authorized for this work.

The following list shows commodities and volume certified at various terminals in New Jersey during the fiscal year.

Product	Volume
Apples	869 cartons
Cabbage	90 crates
Cranberries	595 50-pound bags
Grapefruit	40,000 pounds (bulk)
	744 cartons
Lemons	2,768 cartons
Onions	400 50-pound master containers
Oranges	13,184 cartons
Peaches	3,650 3/4 bushels
Plums	990 crates
Potatoes	114,455 hundredweight
Strawberries	44 16-quart boxes
Tomatoes	2,600 cartons

Inspections of fresh products delivered to institutions totaled 172, including inspection of items for replacement of rejections on original deliveries. Volume totaled 1,232,702 pounds.

Potato Labeling Law

A newly assigned duty of the Bureau of Fruit and Vegetable Service is the enforcement of "The Potato Labeling Law." This bill was introduced April 22, 1963, and was approved June 25, 1963. The State Board of Agriculture adopted rules and regulations for its enforcement on October 22, 1963.

The purpose of this law is to promote the development of the potato industry in New Jersey. It prohibits the misbranding of packages of potatoes produced in New Jersey (or any other state), and subsequently offered for sale in New Jersey. It provides an opportunity for the public to purchase potatoes properly identified as to quality, condition and grade.

After the rules and regulations were approved by the State Board of Agriculture, six public meetings were held with various segments of the potato industry to familiarize the trade with the law. Personal visits were also made to all produce buying agencies of chain stores which have retail outlets within the State.

Since May 1964, 221 inspections have been carried out on retail premises in the State. These outlets include chain stores, independent grocers and roadside markets.

Two men from this Bureau have been assigned to the enforcement of this law.

PRINCIPAL COMMODITIES SOLD AT FRUIT AND VEGETABLE AUCTION MARKETS
VOLUME IN 1963 WITH 1962 COMPARISONS

Commodity	Unit	1963	1962
Apples	Bushels	24,617	22,769
Peaches	Bushels	106,765	126,919
Blueberries	Trays, 12 pints	40,986	29,133
Raspberries	Crates, 12 pints	6,255	7,201
Strawberries	Crates, 16 quarts	218,332	194,761
Asparagus	Crates, doz. bunches	394,888	371,678
Beans, Lima	Bushels	13,168	20,152
Beans, Snap	Bushels	234,733	173,633
Beets	Bushels	30,089	28,882
Cabbage	Crates, 50 lbs.	182,360	143,162
Cantaloup	Bushels	46,916	40,370
Cauliflower	Crates	4,424	2,684
Corn, Sweet	Crates and sacks	26,093	27,744
Cucumbers and pickles	Bushels	122,598	186,563
Eggplant	Bushels	168,834	175,751
Escarole and endive	Bushels	41,633	40,732
Lettuce	Crates, 24 heads	341,258	251,553
Onions	Sacks, 50 lbs.	59,993	95,562
Peppers	Bushels	532,847	580,696
Potatoes, sweet	Bushels	99,513 1/	139,975 1/
Potatoes, white	Sacks, 100 lbs.	11,546	14,986
Spinach	Bushels	22,996	19,956
Squash	1/2 Bushels	184,437	176,439
Tomatoes	1/2 Bushels	371,268	437,132

1/ Totals are for months of September, October and November only.

SUMMARY OF SALES AT FRUIT AND VEGETABLE AUCTION MARKETS

	SEASON OF 1963				SEASON OF 1962			
	AUCTION SALES		SPECIAL SALES[1]		AUCTION SALES		SPECIAL SALES[1]	
rket	No. of Pkgs. Sold	Sales Value	No. of Pkgs. Sold	Sales Value	No. of Pkgs. Sold	Sales Value	No. of Pkgs. Sold	Sales Value
verly	79,823	$ 77,591.08	..	..	86,854	$ 81,239.99	..	..
Corn	..	..	161,137	$344,672.01	..	..	..	..
Peaches	..	..	24,970	78,370.82	..	..	..	..
darville	296,328	729,604.90	..	..	420,757	1,023,309.85	54,664	$ 78,453.25
assboro	346,603	788,640.02	82,432	289,822.85	375,756	721,034.35	98,562	289,886.55
mmonton	144,877	660,151.50	..	..	119,330	588,759.70	749	749.00
Blues-fresh	..	..	176,177	613,018.27	..	..	202,831	619,001.76
Blues-proc.	..	..	..	..	..	..	231,140 lbs.	40,796.21
ghtstown	438,729	481,899.95	..[4]	..[4]	478,488	480,796.74	33,978	71,154.35
ndisville	381,562	693,261.98	27,578	32,557.40	482,779	723,303.00	29,727	35,018.70
dricktown	118,328	431,941.85	..	..	146,843	538,098.00	..	..
wedesboro	471,905	1,464,984.25	..	..	536,048	1,511,003.18	..	..
Asp.-proc.[2]	..	..	882,651 lbs.	101,446.86	..	..	1,034,197 lbs.	129,276.37
neland	1,672,449	3,072,578.32	..	..	1,665,150	3,146,508.99	..	..
otals	3,950,604	$8,400,653.85	472,294	$1,459,888.21	4,312,005	$8,814,053.80	420,511	$1,264,336.19
otal - pounds for processing[3]			882,651				1,265,337	
otal value - auction and special sales				$9,860,542.06				$10,078,389.99

verage price per package (by auction), 1963 $2.126
verage price per package (by auction), 1962 $2.044

All types of contract or negotiated sales other than auction.

Pay weight.

Total pounds not included in total number of packages.

"Special Sales" figures not submitted, due to fire at Hightstown Market.

BUREAU OF LICENSING AND BONDING

As required by State law, this Bureau issues licenses to dealers, brokers and commission merchants who receive, handle or purchase certain agricultural commodities from New Jersey farmers or farm cooperatives. The products covered are milk, cattle, fruits, vegetables, eggs, live poultry, hay, grain and straw.

In addition, licenses must be issued to disposal plant operators, who process the bodies of dead animals or packing house refuse, and to garbage-feeding hog farm operators. The Bureau also licenses nutria farms and controlled atmosphere apple storages.

Milk Dealers' Licensing and Bonding Act

Licenses to purchase milk or cream from New Jersey producers during the period July 1, 1963, to June 30, 1964, were issued to all 90 applicants. Before a license is issued, the applicant is required to file surety or United States Government securities with the secretary of agriculture for the period of the license. The amount of each person's bond is based upon the dollar value of his anticipated purchases from producers during a maximum operating month. The licensing law provides that such bonds may not be less than one and one-half times the monthly value of the milk received from New Jersey producers and must not exceed $100,000.

Federal Marketing Orders 2 and 4 have extended the period in which payment must be made for each month's milk purchases. Accordingly, the State Board of Agriculture increased the amount of bond required of dealers operating under these orders. Those persons under Order 2 must provide bonds equal to twice the maximum monthly dollar value of their purchases. Order 4 dealers are required to provide bonds equal to one and two-thirds the maximum monthly purchases from their producers.

The Bureau chief and assistant secretary of agriculture attended several discussion meetings with interested industry organizations before the proposed policy of increased bond requirements was submitted for consideration by the State Board.

Milk dealers provided $4,447,500 in bonds this year in support of their licenses. The bonds consisted of $373,500 in United States Government securities and $4,074,000 in surety bonds. Although the possibility of the Department's receiving claims against the bond of one dealer does exist at this time, no claims have yet been received from the four producers who are eligible. It appears that unpaid obligations may be satisfied by the licensee before the termination of the period in which claims may be filed, i.e., September 28, 1964.

Produce Dealers' Licensing and Bonding Act

Persons engaged in handling, receiving or purchasing fruits, vegetables, shell eggs, live poultry, hay, grain and straw from New Jersey growers are licensed under this act.

Licenses were issued to 586 commission merchants, dealers and brokers for the period May 1, 1963, to April 30, 1964. Each applicant must provide a surety bond or United States Government securities in support of his license. The size bond is determined on the basis of the maximum dollar value of monthly purchases from New Jersey growers in conjunction with the timeliness of payment.

The act stipulates bonds of $3,000 minimum to $25,000 maximum. Growers may file claims with the secretary of agriculture for unpaid obligations due them. The period for filing terminates within 90 days from the end of the license period.

This year bonds totaling $2,940,000 were deposited with the secretary, $86,000 being in United States Government securities and $2,854,000 in surety bonds.

Complaints concerning disputes in amounts to be paid by licensees were received from 22 farmers against 21 dealers. For the most part, such complaints are resolved by personal contact with the dealer and grower so that claims were not filed nor formal hearings required. Such informal efforts resulted in the return of $16,797.68 to New Jersey farmers.

One formal hearing was held in order to determine the responsibility of an egg dealer concerning the loss of eggs which were in transit from New Jersey farmers to his place of business.

Claims Against Produce Dealers' Bonds

During the license year 50 growers filed claims against four licensed dealers. The claims totaled $79,134.67 while the bonds amounted to only $35,000. Pro rated payments of $30,000 were made. Claims of $1,869.39 against the $5,000 bond of one dealer were paid in full.

Due to statutory provisions, the above claims are those concerning agricultural commodities received during the license period terminating April 30, 1963, on which no action in payment or audit was effected until the 1963-64 fiscal year.

Licensing of Cattle Dealers, Disposal Plant Operators and Garbage-Feeding Hog Farms

Licenses issued in these three classes of operation are conjunctive with disease control programs carried on by the Division of Animal Industry. In the case of disposal plants and hog farms, each premise is inspected by representatives of that Division before a license is issued.

As of June 30, 1964, licenses were issued to 230 hog farm operators, 133 cattle dealers and 42 disposal plant operators. The last category includes those who only operate trucks for the removal of dead animals or parts thereof to a recognized disposal plant for processing.

Controlled Atmosphere Storage (Apples)

This year the Bureau issued licenses to eight operators of "controlled atmosphere" storages for apples. Inspection of facilities and approval for license, in addition to continued supervision of each operation, was conducted by the Bureau of Fruit and Vegetable Service.

A fee of $5.00 for each room operated is charged each applicant. Licenses expire one year from the date of issuance.

Registry of Nutria Farms

Since the first issuance of "certificates of registry" to nutria farms was completed in 1962, no further applications have been received.

BUREAU OF MARKET NEWS AND COOPERATIVES

Cooperative Service

The number of requests for assistance in resolving cooperative business problems increased sharply during the year. Most of these problems have been caused by amendments to the Federal income tax laws as they apply to farmer cooperatives. The amendments were made by the Internal Revenue Act of 1962.

The Internal Revenue Service has been most cooperative and understanding of the problems of cooperatives in complying with the provisions of the code and the subsequent regulations. The Bureau chief, along with representatives of many other organizations, has met numerous times with the assistant commissioner of Internal Revenue and his staff to prevent unworkable regulations from being written. The regulations as now written are not as restrictive as earlier anticipated, but do require precise actions by farmer cooperatives if they desire to continue without tax liability.

The Corporation Business Tax Act of the State of New Jersey provides exemption for farmer cooperatives if they either incorporated or domesticated under the provisions of Chapter 13 Title 4 of the Revised Statutes. They must also be in possession of a Letter of Exemption granted under the provisions of the Internal Revenue Code. Due to increased efforts of the Corporation Tax Bureau to find taxable corporations, cooperatives were urged to apply for and receive letters of exemption. The Bureau does not have evidence that all cooperatives have such a letter as of June 30 and it is strongly suspected that some are still in a vulnerable position taxwise. This not only applies to the New Jersey Corporation Tax Act but to the Internal Revenue Act itself.

Federal Government Recognizes Cooperatives Value

The United States Department of Agriculture has put itself on record to aggressively support programs to strengthen farmer cooperatives. Statements by the President indicate the administration is behind this move. Preliminary plans include increased activity in the Land-Grant colleges in the fields of research and education in the cooperative field, even to the

proposal that a cooperative business specialist be attached to the staff. Other departments, such as the Justice Department, are expected to have a more benign approach to cooperative activities such as mergers and acquisitions.

The College of Agriculture and the Cooperative Extension Service of New Jersey are examining their programs for the purpose of providing increased educational and research opportunities for cooperative businesses. The New Jersey Department of Agriculture has been charged with the responsibility to enforce the regulatory provisions of the Agricultural Cooperative Associations Act. However, the legislation setting up the Department of Agriculture went further when it wrote the duties of the Department. This is included in Chapter 10 Title 4, specifically Section 2, paragraph c: "Assist and advise in the organization and maintenance of producers' and consumers' cooperative selling and buying associations." Any programs of the two agencies must, therefore, be completely coordinated and complementary to each other so that confusions are not substituted for assistance and advice.

Financial Supervision of a Cooperative Authorized

In 1961 the State Board of Agriculture, after ascertaining that the bankruptcy of an egg producers' cooperative would place the whole egg industry in a chaotic position, authorized the chief of the Bureau to supervise the finances of the association until it was in a sound financial condition. As of June 30, approximately 75 per cent of the debts of this cooperative have been paid.

Ability to repay the balance at the former rate is becoming increasingly difficult. The New Jersey Crop Reporting Service has estimated a decline of about one million hens and pullets of laying age on New Jersey farms between January 1, 1963 and January 1, 1964. This compares with an approximate loss of 200,000 between 1962 and 1963 and about 500,000 between 1961 and 1962. This cooperative shares in the decline. As its income is directly tied to members' eggs marketed through a dues per case deduction, it is easy to see that total income to the cooperative has decreased. Ability to repay debts is based on that narrow margin between total income and operating costs.

All Egg Marketing Cooperatives Affected by Decline in Poultry Numbers

Declining numbers of flocks are causing problems to all New Jersey egg marketing cooperatives. By far, the largest decline is attributable to retirement of flock owners. Many of these have reached an age when they can collect social security. Some have reduced the size of the flock to an amount that can be serviced by other members of the family and the flock owner has taken another job. Others have left the farm entirely for other sources of income. Young people are reluctant to take on the hazards of egg farming, its uncertain income and the restrictions of the seven-day week labor. Partially this has been offset by some producers who have increased their flocks. Also some feed men have gone into egg production to maintain an outlet that would help keep feed volume at an efficient capacity level.

Marketing organizations are finding that receivers are selective in placing orders, not only on the basis of price, but on the ability of the cooperative to supply the volume needed. In the face of the decline in flock

numbers, it becomes more difficult to replace the producer who drops out. Small wonder that cooperatives are considering any plan that seems to be an answer to their particular operating problem.

Obviously the short cut to economic operation would be through merger of facilities and organizations. It is doubtful that the necessity is great enough at this time to encourage such a move.

Fruit and Vegetable Cooperatives Face Problems, Too

The historic auction method of sale in most cases is gradually giving way, resulting in a decline in the volume moving through most auction markets. A strong factor in this shift is the apparent willingness of the large operator to furnish his own marketing service. Many markets are getting close to a period of marginal operating losses and savings. As the railroads have found out, increases in the fee schedules will accelerate the trend of the larger operators to provide their own marketing service to avoid these charges. Here again, there is an opportunity for merger studies.

New Jersey Council of Farmer Cooperatives

The New Jersey Council of Farmer Cooperatives, Inc., is composed entirely of farmer cooperatives. Its objectives are to prove a climate of cooperative responsibility to the farmer members of the cooperatives of New Jersey.

The Council sponsored three director training conferences, with the College of Agriculture, the Cooperative Extension Service and the New Jersey Department of Agriculture cooperating. Additional training conferences are planned at dates that will permit greater attendance.

Debt Recovered

The Bureau recovered a $2,000 debt owed to the Independent Blueberry Cooperative Association. While this is not a duty of the Bureau, it seemed to be a reasonable service that could be provided without conflict with other agencies.

Market News

Fruits and Vegetables

The function of the New Jersey Fruit and Vegetable Market News Office is to collect and disseminate wholesale price and supply information. During the 1963-64 season, f.o.b. shipping point prices were reported on Iceberg lettuce, cabbage, cucumbers, sweet corn, dry onions, peaches, white potatoes and sweet potatoes. Auction prices were reported on asparagus, snap beans, green onions, various greens, eggplant, peppers, tomatoes, squash, strawberries and other miscellaneous crops. In all, prices were reported on 24 different New Jersey crops.

Market information was disseminated through radio, telephone answering services, mailed reports and by direct phone contact. Radio station WSNJ

in Bridgeton carried a five-minute program at 12:20 p.m. five days a week for the entire year. The JERS-I-TAS, or Jersey Information Telephone Answering Service, at the Department's Bridgeton office, has two messages daily, one at mid-morning and a second in the late afternoon. Length of message varies from three to five minutes depending on the time of the year.

A detailed two-page report is mailed daily to approximately 700 growers, buyers, brokers and others interested in New Jersey fruits and vegetables. This report contains local and competing f.o.b. prices, national supply information, daily terminal market prices and other related information. Special reports were also included periodically.

New Jersey prices and other information are sent over the United States Department of Agriculture leased wire services to market news offices all over the country. This information is used in their daily reports and is also sent to agricultural interests in their areas.

At the end of the marketing season, summaries were prepared on 15 of the major New Jersey crops. These summaries are a historical record of the past season and can be used as guidelines in developing new markets and strengthening existing marketing programs. These summaries were released early in 1964 with each book analyzing one or more of the 15 major crops. Four booklets, totaling 172 pages, were prepared and sent to between 400 to 600 growers, buyers, brokers and institutions, as well as to others who requested them. At the start of the 1964 season, a new publication that showed graphically the relative importance and dominance of New Jersey grown produce compared with other major supply states, was sent to a mailing list of approximately 1,000 in the fruit and vegetable industry. This booklet was received enthusiastically and opens up new ways for better understanding and utilization of market news.

Poultry and Eggs

In September, the Bureau was asked to begin aiding in obtaining data for the weekly United States Department of Agriculture Commercial Egg Movement Report.

During the last six months of 1963, the market news reporter spent much time in the Federal Dairy and Poultry Market News office in Philadelphia assisting the staff there.

In January, the market reporter accepted a promotion to supervisor of agricultural statistics with the New Jersey Crop Reporting Service.

The supervisor of dairy standardization has assumed the responsibilities of the poultry and egg market news reporter and has spent considerable time at the Philadelphia office preparing for this work.

The New Jersey market news service is assisting the United States Department of Agriculture market news service with daily information on the movement of cartoned eggs to the North Jersey-New York metropolitan area.

BUREAU OF POULTRY SERVICE

The decrease in the number of egg production flocks in New Jersey has now abated somewhat. The current expansion of existing larger flocks tends to offset some of the decline in hen numbers.

Egg prices during the spring dipped to an unfavorable low level. Supplies from distant points of production were more than adequate, thus depressing local values. New Jersey egg production has declined now to the extent that it is less than the needs of the State's population.

According to the New Jersey Crop Reporting Service, there were 8,112,000 layers on New Jersey farms in June 1964 compared with 9,138,000 in June 1963. This is a decrease of 11.3 per cent. Egg production in New Jersey was also down 11.3 per cent. Nationally, egg production during June this year was up 2 per cent.

Poultry Standardization

This program originated as a service to the poultry industry of New Jersey in 1923 and was administered entirely under rules and regulations established by this Department. In 1935, a National Poultry Improvement Program was established which was quite similar to the State program. The objective was uniformity of poultry standardization work. Later, in 1943, a program applicable to turkeys was added. These services are now referred to as the National Poultry and Turkey Improvement Plans. This is, therefore, the 41st year of Department service to the poultry industry of New Jersey in poultry standardization work and the 29th year of such service under the identity of the National Program.

Operating under the N.J.-U.S. Poultry and Turkey Improvement Plans, the Bureau certified 412,288 birds from 108 flocks in 16 counties. The number of birds in participating flocks was 0.96 per cent more than the 1962-63 total of 408,350 birds in 113 flocks. Forty-two hatcheries cooperated in the 1963-64 program. Seven of the 42 hatcheries with a total of 406,200 eggs did not set any eggs. To save labor, their eggs were set in the other hatcheries.

Fifty-one privately employed workers were certified as flock selectors and 52 as pullorum-typhoid testing agents working in various phases of the N.J.-U.S. National Poultry Improvement Plan.

Department personnel selected and blood-tested 309,000 birds (75 per cent of the total); 103,000 birds were handled by field agents. The agents were assisted and their work was closely supervised and found satisfactory by the Bureau of Poultry Service inspector and one Division of Animal Industry employee.

Participating flocks averaged 4,082 birds last year compared with the 1,746-bird flock average of 10 years ago. Total capacity of the participating hatcheries is 5,214,950 eggs per setting. This is about 89 per cent of the total hatchery capacity for New Jersey. The average capacity of participating hatcheries is 124,165 eggs per setting.

The trend since 1953 toward fewer hatching egg flocks and hatcheries in New Jersey continued in 1963-1964. Twenty-seven New Jersey hatcheries and flock owners have franchise breeding contracts with 20 out-of-state breeders. Three New Jersey breeders are selling their replacement stock in other states and countries on a non-franchise basis.

The breeding and health classifications used were:

Breeding Stages	Pullorum-Typhoid Classes
N.J.-U.S. Certified	N.J.-U.S. Pullorum-Typhoid Clean
N.J.-U.S. Approved	

The scope of the services of the poultry standardization program is indicated in Poultry Table 1.

POULTRY TABLE 1

N.J.-U.S. Improvement Plans	1963-1964	1962-1963
Number of flocks cooperating	108	113
Total number of breeders	412,231	408,350
Number of hatcheries cooperating	42	40
Hatchery capacity cooperating	5,215,000	5,313,630
Hatchery capacity in New Jersey	5,800,000	6,189,000
Number of birds in pullorum-typhoid classes only	...	...
Number of birds in Approved Stages	334,703	319,326
Number of birds in Certified Stages	77,528	89,024
Percentage of birds reacting to the pullorum-typhoid test	0.00	0.00
Number of flock inspections	85	110
Number of hatchery inspections	34	35

Poultry Table 2 gives the classification and distribution of birds under supervision, and the number of birds banded by breeds and by counties. Cumberland County leads in number of breeding birds, followed by Salem, Monmouth, Mercer, Hunterdon and Ocean.

The 237,048 White Leghorns accounted for 57.4 per cent of the total of all varieties enrolled in the State program. White Rocks numbered 9,782 and Rhode Island Reds, 850. Crosses numbered 136,692 and Incross mated numbered 20,170.

Participation in the Turkey Improvement Program totaled 5,731 birds, a 33.1 per cent decrease from 1962-1963.

The annual school for flock selectors and pullorum-typhoid testers was not held. One new agent, qualified in another state, was checked in the field and a permit was issued to him as a selector.

A circular, listing participating breeding flocks and hatcheries, with their official rating, was published.

POULTRY TABLE 2
NUMBER OF BREEDERS, BY COUNTIES, BREEDS OR VARIETIES

County	Single Comb White Leghorns	New Hamp-shires	Rhode Island Reds	White Rocks	Crosses	In-cross	Others	Turkeys: Broad Breasted Bronze	Turkeys: Broad Breasted White	Turkeys: Others	Totals
Atlantic	11,483	...	...	...	11,333	...	...	...	...	...	22,816
Burlington	1,123	...	...	...	100	...	...	...	...	...	1,223
Camden	...	...	...	...	...	...	...	...	...	...	...
Cape May	14,595	...	...	...	...	...	...	...	...	...	14,595
Cumberland	36,185	...	411	5,940	25,820	10,233	1,343	...	...	...	79,932
Gloucester	1,852	...	...	...	770	...	234	...	...	...	2,856
Hunterdon	29,080	...	...	...	4,292	...	...	...	...	...	33,372
Mercer	21,110	...	307	...	8,034	...	...	2,345	333	...	32,129
Middlesex	19,498	...	...	...	...	...	...	...	...	...	19,498
Monmouth	55,794	...	...	565	17,461	...	...	...	817	...	74,637
Morris	...	...	...	...	...	...	...	...	...	...	...
Ocean	29,726	...	...	...	...	9,258	...	1,502	...	...	40,486
Passaic	187	...	132	...	...	...	...	...	...	...	319
Salem	460	318	...	3,277	68,882	...	63	...	...	57	73,057
Somerset	8,545	...	...	...	...	...	...	...	...	...	8,545
Sussex	1,245	...	...	...	...	...	...	...	677	...	1,922
Warren	6,165	...	...	...	...	679	...	...	...	...	6,844
Totals	237,048	318	850	9,782	136,692	20,170	1,640	3,847	1,827	57	412,231
1962-1963	242,807	...	1,505	8,134	129,953	15,901	1,477	8,069	505	...	408,350

Cooperative Marketing

Egg marketing cooperatives which have facilities to physically handle the eggs of their members are located in Wayne, Hackettstown, Flemington, Mount Holly and Vineland. These cooperatives report to the Department the volume and gross value of their sales. Bargaining cooperatives which negotiate contracts with receivers for their members are located mostly in the Lakewood-Toms River and Vineland areas. These bargaining cooperatives do not report their volume of sales to the Department.

The cooperatives located in Wayne, Hackettstown, Flemington and Mount Holly continue to conduct live poultry sales.

The New Jersey Poultry and Egg Cooperative Marketing Association, which is a cooperative serving the Flemington, Mount Holly and Vineland auctions, discontinued the candling and cartoning of eggs. The member cooperatives also perform this function. Therefore, the accounts being served were transferred equitably to the respective member associations, thus permitting the eggs to travel more directly to the retail store with less handling.

Poultry Table 3 provides a comparison of seasonal values on a monthly basis.

Poultry Table 4 shows the total volume and value of sales for the year, as well as a comparison of the price per unit for both eggs and poultry.

POULTRY TABLE 3

AVERAGE PRICE PER DOZEN EGGS ON FIVE NEW JERSEY AUCTION MARKETS

Month	1963	For Comparison 1962	1939
July	$0.3362	$0.3437	$0.2647
August	.3511	.3826	.2678
September	.4065	.4133	.2948
October	.3664	.3763	.3029
November	.3707	.4040	.3118
December	.3907	.4058	.2453
	1964	1963	1939
January	.4327	.4009	.2372
February	.3668	.4082	.2260
March	.3637	.3937	.2305
April	.3090	.3322	.2218
May	.2969	.2996	.2146
June	.3110	.3135	.2384

POULTRY TABLE 4

SUMMARY OF EGG AND POULTRY AUCTION MARKETS

July 1, 1963 to June 30, 1964

Market	Cases of Eggs	Value of Eggs	Crates of Poultry	Pounds of Poultry	Value of Poultry	Total Value
Flemington	141,291	$1,511,740.92	3,713	152,529	$23,556.65	$1,535,297.57
Hackettstown	28,207	310,487.44	2,163	128,514	11,693.25	322,180.69
Mount Holly	31,939	342,256.58	2,207	130,225	9,719.67	351,976.25
Paterson	25,026	273,310.43	860	55,299	4,464.73	277,775.16
Vineland	221,224	2,355,391.88	...	...	...	2,355,391.88
Totals	447,687	$4,793,187.25	8,943	466,567	$49,434.30	$4,842,621.55

Average price per case 1963-1964	$10.71	Average price per pound of live poultry 1963-1964	$0.106
" " " " 1962-1963	$11.11	" " " " " " " 1962-1963	$0.117

The development of the marketing program is traced in Poultry Table 5.

POULTRY TABLE 5

TEN-YEAR SUMMARY OF NEW JERSEY POULTRY AND EGG AUCTION SALES

Year	Number Cases of Eggs	Number Crates of Poultry	Pounds of Poultry	Total Combined Value Eggs and Poultry
1963-64	447,687	8,943	466,567	$ 4,842,621.55
1962-63	469,146	11,723	614,537	5,282,611.04
1961-62	535,012	17,383	927,351	6,109,591.38
1960-61	528,863	21,156	1,110,913	7,144,660.91
1959-60	756,047	42,071	1,542,364	8,551,099.31
1958-59	990,802	49,724	2,546,418	12,198,175.14
1957-58	1,036,495	61,634	3,110,486	14,958,559.86
1956-57	1,201,770	83,501	4,237,116	15,143,821.58
1955-56	1,181,742	99,084	4,954,517	18,245,286.84
1954-55	1,348,732	112,629	5,718,722	18,148,548.35
Totals	8,496,296	507,848	25,228,991	$110,624,975.96

Auction Markets' Egg-Feed Ratio

The egg-feed ratio is the relation between one major production cost item and the price received for eggs. The ratio is an indication of the prosperity of the egg producer. It is generally accepted that an egg-feed ratio of 8.5 dozen = 100 is about marginal. On this basis the months of April, May and June were not favorable, as the average price per dozen indicates. The lowest average price per dozen occurred in May.

Poultry feed costs during 1963-1964 averaged $3.84 per hundredweight, the same as the previous fiscal year. The average price per dozen eggs was .0142 cents less than in 1962-1963.

Based on actual reports and estimates, the average New Jersey hen in 1963-1964 produced 16.33 dozen eggs, which earned a gross income of $5.85. With a feed cost of $3.84, a balance of $2.01 per bird was left for all other costs.

POULTRY TABLE 6

NEW JERSEY EGG AUCTIONS - EGG-FEED RATIO

	July			August			September		
EGGS	1963	1962	1939	1963	1962	1939	1963	1962	1939
Total dozens sold	1,234,680	1,318,100	891,300	1,211,490	1,295,490	900,540	1,114,710	1,178,400	855,660
Total price paid	$415,105.71	$452,978.50	$235,920	$425,327.23	$495,626.08	$241,138	$453,154.25	$487,148.79	$252,290
Av. price per doz.	$ .3362	$ .3437	$ .2647	$ .3511	$ .3826	$ .2678	$ .4065	$ .4133	$ .2948
FEED									
Av. 100 lbs. scratch	$3.70	$3.60	$1.60	$3.65	$3.60	$1.50	$3.70	$3.60	$1.86
Av. 100 lbs. mash	$4.15	$3.95	$2.18	$4.15	$4.00	$2.16	$4.15	$4.00	$2.02
Av. laying ration	$3.92	$3.77	$1.89	$3.90	$3.80	$1.83	$3.92	$3.80	$1.94
RATIOS									
Doz. eggs required to buy 100 lbs. feed	11.66	10.97	7.1	11.11	9.93	6.8	9.64	9.19	6.6
No. lbs. feed one doz. eggs will buy	8.58	9.12	14.0	9.00	10.07	14.6	10.37	10.88	15.2

	October			November			December		
EGGS	1963	1962	1939	1963	1962	1939	1963	1962	1939
Total dozens sold	1,263,930	1,346,700	955,430	1,078,770	1,153,050	969,330	1,101,660	995,970	1,135,350
Total price paid	$463,152.96	$506,891.68	$301,571	$399,909.11	$465,836.10	$302,285	$430,519.42	$404,134.40	$278,465
Av. price per doz.	$ .3664	$ .3763	$ .30296	$ .3707	$ .4040	$ .3118	$ .3907	$ .4058	$ .2453
FEED									
Av. 100 lbs. scratch	$3.65	$3.55	$1.78	$3.50	$3.55	$1.77	$3.65	$3.60	$1.83
Av. 100 lbs. mash	$4.10	$4.00	$2.54	$3.95	$4.05	$2.25	$4.00	$4.05	$2.58
Av. laying ration	$3.87	$3.78	$2.16	$3.72	$3.80	$2.14	$3.82	$3.82	$2.20
RATIOS									
Doz. eggs required to buy 100 lbs. feed	10.56	10.05	7.1	10.04	9.41	6.9	9.78	9.41	9.0
No. lbs feed one doz. eggs will buy	9.47	9.96	14.0	9.97	10.63	14.6	10.23	10.62	11.2

POULTRY TABLE 6 - Continued

NEW JERSEY EGG AUCTIONS - EGG-FEED RATIO

	January			February			March		
EGG	1964	1963	1939	1964	1963	1939	1964	1963	1939
Total dozens sold	961,110	1,021,050	1,099,080	912,180	957,570	1,085,550	1,095,000	1,069,320	1,372,230
Total price paid	$415,961.60	$409,326.98	$260,807	$334,603.53	$390,918.34	$245,377	$398,210.22	$420,941.17	$316,304
Av. price per doz.	$ .4327	$ .4009	$ .2373	$ .3668	$ .4082	$ .2260	$ .3637	$ .3937	$ .2395
FEED									
Av. 100 lbs. scratch	$3.60	$3.65	$1.54	$3.70	$3.70	$1.54	$3.70	$3.70	$1.56
Av. 100 lbs. mash	$4.05	$4.10	$2.04	$4.15	$4.15	$2.04	$4.10	$4.10	$2.06
Av. laying ration	$3.82	$3.87	$1.79	$3.92	$3.92	$1.79	$3.90	$3.90	$1.81
RATIOS									
Doz. eggs required to buy 100 lbs. feed	8.83	9.65	7.5	10.69	9.60	7.9	10.72	9.91	7.9
No. lbs. feed one doz. eggs will buy	11.33	10.36	13.3	9.36	10.41	12.6	9.33	10.09	12.7

	April			May			June		
EGGS	1964	1963	1939	1964	1963	1939	1964	1964	1939
Total dozens sold	1,170,720	1,239,870	1,213,620	1,116,390	1,332,660	1,388,070	1,169,970	1,166,190	1,117,170
Total price paid	$361,783.48	$411,843.48	$269,177	$331,546.69	$399,243.56	$297,863	$363,913.05	$365,605.48	$266,289
Av. price per doz.	$ .3090	$ .3322	$ .2218	$ .2969	$ .2996	$ .2146	$ .3110	$ .3135	$ .2384
FEED									
Av. 100 lbs. scratch	$3.60	$3.70	$1.58	$3.55	$3.65	$1.64	$3.60	$3.70	$1.69
Av. 100 lbs. mash	$3.95	$4.15	$2.11	$3.95	$4.05	$2.18	$4.00	$4.05	$2.18
Av. laying ration	$3.77	$3.92	$1.84	$3.75	$3.85	$1.91	$3.80	$3.87	$1.94
RATIOS									
Doz. eggs required to buy 100 lbs. feed	12.20	11.80	8.3	12.63	12.85	8.9	12.22	12.34	8.1
No. lbs. feed one doz. eggs will buy	8.20	8.47	12.1	7.92	7.78	11.2	8.18	8.10	12.3

Grading and Inspection Service

This service includes supervision of the packaging of eggs under the New Jersey Seal of Quality and making inspections, as may be requested by persons or firms, of eggs to determine quality or grade.

Regulations established by the State Board of Agriculture govern the use of the Seal of Quality. They provide that New Jersey producers supplying eggs, as well as the person or firm licensed to package eggs under the seal, must have suitable egg holding facilities; that the quality of the eggs at the point of production must be commensurate with the quality standards for eggs packaged under this official emblem; and that the containers of such identified eggs must be approved so that the area of distribution of these eggs is known to the Department.

The regulations also provide that eggs identified with the Seal of Quality must conform to the established standard of quality or be removed from sale until made to conform. Supervision to determine this is effected through periodic visits to persons or firms licensed to use the seal and regular inspections of the eggs made at retail outlets. A licensee who fails to adhere to the high quality standards is subject to revocation of his license.

A license to package eggs under the Seal of Quality is granted with the understanding that only New Jersey eggs are handled in the plant. If handling out-of-state eggs is part of the licensee's business, then the licensee must have an employee or agent of the Department in the plant. His duty is to be certain that only qualified New Jersey eggs are packaged under the seal. There are four instances where a Seal of Quality licensee also uses the egg grading service of the United States Department of Agriculture. These firms also use out-of-state eggs. Therefore, the Federal employee stationed in the plant is licensed to serve as an agent of the New Jersey Department of Agriculture.

A cooperative arrangement had existed between the United States Department of Agriculture and this Department through a letter of concurrence enabling egg graders in either Department to be of service to either agency. Thus, as stated above, a Federal employee may be licensed to serve as our agent while the Federal agency may license New Jersey egg inspectors to serve as egg graders. Upon the advice of the Attorney General's office, a conflict of interest exists where State personnel grade eggs for the Federal agency and then as law enforcement agents are required to inspect these eggs at retail points. For this reason State personnel assist the Federal agency only in emergency situations. The letter of concurrence has now been replaced with a Federal-State agreement.

Thirty-one firms are now licensed to use the Seal of Quality on eggs. The total volume of eggs packaged under the seal during this fiscal year was 478,073 30-dozen cases or 14,342,190 dozens. The field staff made 900 supervisory visits to the licensed firms during the year.

Eggs purchased for use by New Jersey institutions are required to bear the New Jersey Seal of Quality. Although the vendor assumes full responsibility for the eggs conforming to purchase specifications, the State

purchasing agency requires certification of the quality by the Department. During the first eight months of the year this certification was made at the point of origin on the total volume prepared for delivery to a number of institutions. During the last four months certification was made at each institution after the eggs were delivered, thus each lot received by an institution was treated separately.

Fresh Egg Law Enforcement and Enforcement of Established Standards for Eggs

During recent years the term "fresh" as used in the marketing of eggs has not lost its importance in describing egg quality, but the use of terms descriptive of grade and size has increased. The term "fresh," therefore, is seldom used alone now, but instead in combination with "Grade A" and the size designation.

The term "fresh" as defined in the law is descriptive only of a specific interior quality for eggs while "Grade A" takes into account both interior and exterior quality, which includes cleanliness and soundness of shell. For this reason eggs inspected at the retail level under the provisions of the Fresh Egg Law are simultaneously inspected under the provisions of Chapter 10, Title 4, of the Revised Statutes to determine their conformity with the designated grade and size. The details of an inspection are recorded on one report form in such a manner that the nature of the violation can readily be determined.

New Jersey standards for quality grade and size of eggs were revised during the year and made the same as the United States Standards.

There were 29,372 inspections made this year and 752 violations were found. Violations amounted to 2.56 per cent compared with 2.81 per cent last year. Notices of warning were issued to violators to effect compliance. In one instance more severe action was necessary, which resulted in the Department accepting settlement under the penalty provisions of the law.

Legislation which was designed to update New Jersey laws governing the marketing of eggs was introduced again this year in the Assembly. It passed the Assembly with no opposition and was introduced in the Senate where it was assigned to and remained in committee. The Central Jersey Egg Dealers opposed Senate action on the bill.

Source Identification Law

Nine hundred and thirty-three inspections were made under the provisions of this law. Violations totaled 485. For the most part the violations consisted of absence of the name and address of the packer or distributor on the container, or failure to obliterate the markings of the previous user on reused egg cases. Notices of warning were issued to violators.

Ten egg marketing brand names were registered during the year with the secretary of agriculture under the provisions of this law. Since registration began, 234 brands have been registered. These are brands which use the name of New Jersey or that of any county or municipality therein in identifying the origin of the eggs.

MARKET DEVELOPMENT

Market development activities included the programs of the four agricultural commodity promotion councils and the work of two full-time and two part-time farm products marketing representatives in behalf of a variety of New Jersey commodities. In addition, the staff includes a market facilities and transportation specialist, who devoted most of his efforts to the development of a major food distribution center in northern New Jersey.

Apple Industry Council

New Jersey apples are sold for fresh use 12 months of the year. Therefore, the Council's program is designed to promote apples the year-round.

The new crop of apples starts with the harvest of the Starr variety in early July. To support the sale of these apples, the Council sent original recipes to newspaper food editors and home agents. Pre-season calls were made on produce buyers and more than 4,000 price cards were delivered to chain store organizations. A new green apple recipe leaflet was developed and 10,000 copies were distributed to consumers. Direct advertising was done on radio station WOR and on television station WCAU-TV. The delivery of freshly baked apple pies to produce buyers and food editors again evoked a favorable reaction.

During July, the Council cooperated with the peach, cranberry, blueberry and strawberry growers in sponsoring a food editors' conference and tour. An innovation was the flying of the participants directly to Atlantic City. The tour included visits to blueberry and cranberry growing areas of Atlantic County. The Council manager directed the development and conduct of the conference.

October Promotion Activities

October is the big apple month in terms of harvest and sales. During this month, the Council actively participated in the National Apple Week promotion. Almost 3,000 kits of display material were prepared and distributed to chain stores. News releases, recipe dissemination, and television appearances by the 1963 New Jersey Apple Princess were other highlights of the event.

The "Apple Harvest Festival" held in cooperation with the Orange Savings Bank was expanded into a full-fledged endeavor with statewide publicity. The major event was a "Princess" contest which gained widespread recognition and publicity. Other features of the project were an art contest for children, a guessing contest using apples, food editor participation and an extensive advertising and publicity campaign. The finale of the festival was a parade down Main Street in the city of Orange. An immense crowd joined in this salute to the New Jersey apple. A similar, though less extensive, promotion was held at Steinbach's Department Store in Asbury Park.

Stayman Winesap Promotion

Stayman Winesap apples received intensive advertising support in November and December. One hundred and fourteen outdoor billboards, featuring

this variety appeared at selected New Jersey sites during the period. The billboard illustration was reproduced on point-of-sale cards and on a bag insert for use by growers. This provided an effective merchandising tie-in which appealed to produce buyers. Other promotional efforts were newspaper and trade journal publicity, food editor releases and television shows.

The Stayman campaign resulted in good distribution of this variety, but movement was slow. All eastern-grown apples were subjected to intensive price competition from Washington State apples during this period.

Rome Beauty Apples

In March, promotional activities for Rome Beauty apples extended to the produce trade and to food editors. Several thousand Rome apple price cards were distributed. Recipes with photographs were sent to area food editors. A program featuring baked Rome apples was presented on television station WCAU.

General Promotion and Public Relations Work

Many other promotional and publicity activities were pursued during the year. One example was the sponsorship of 15 apple billboards in the Trenton area in cooperation with the Kraft Company. Another illustration was the cooperation extended to the Public Service Electric and Gas Company in a series of meetings for home economics teachers. Apples were used as the theme of the meetings.

The Council exhibited at the New Jersey Education Association Convention in Atlantic City. Orders were taken for apple teaching aids, filmstrips, and the loan of the film, "Gateway to Health." Over 2,000 teachers requested the material.

Apple Grades

A proposed apple labeling law was given final approval by the Grades and Packaging Committee and was presented to the Council. The Council tabled the matter as not being sufficiently advantageous to growers at this time.

Research

An apple marketing study on Julyred apples, which was conducted at Rutgers University under the Council's sponsorship, was completed. The study indicated that this variety appears to have a place in the market at the present time. In order to hold this place, bruising must be kept to a minimum and desirable maturity standards must be met.

Miscellaneous

Liaison with growers was maintained through periodic bulletins, personal visits and exhibits at agricultural functions. Several thousand pieces of display material were distributed to growers.

Active participation was maintained in the affairs of the National Apple Institute. A Council member served as a member of the National Apple Grades Committee.

A smaller 1963 crop will reduce the tax income considerably below the $52,388 collected the previous fiscal year. Tax receipts will probably not exceed $42,000. Expenditures of about $30,000 were made for advertising and promotion. In addition, $5,548 was allotted to the National Apple Institute for promotion of apples nationally, and $2,500 was allotted to Rutgers University for apple marketing research.

Asparagus Industry Council

The Council's promotional program continues to follow the successful formula developed early in 1958. Due to budget limitations, the Council does not advertise directly in newspapers or magazines. Instead, a policy of "editorial service" has been adopted. Pursuing this policy, the Council works closely with newspaper and magazine food editors to supply their requirements for asparagus recipes and food photographs as well as interesting and newsworthy general food information and facts.

The Council has earned a favorable reputation as a dependable source of asparagus information and derives concrete benefits in the form of publicity for all forms of New Jersey asparagus on a year-round basis.

Fresh market operations got under way in January with Council approval of point-of-sale display material. More than 9,000 asparagus merchandising kits were delivered to retail produce outlets within a 150-mile area. An additional 11,000 kits were mailed to wholesale outlets in distant cities which received shipments of fresh New Jersey asparagus. A total of 167,000 individual pieces was distributed.

During the fresh asparagus season special six-bunch crates of asparagus were hand-delivered directly from the farm to 53 influential radio and television personalities and food editors of magazines and newspapers.

As part of an "Asparagus Remembrance Campaign," the Council mailed bayberry candles shaped like asparagus spears to food writers at Christmas. Imported asparagus serving tongs, mounted on a card which listed authoritative suggestions on serving and eating asparagus, were another low-cost gift item mailed to food editors. To promote the use of asparagus in cook-out menus, the Council designed a candle replica of a bunch of asparagus. It incorporated an insect repellent and was recommended for use during evening patio cook-outs. A kit for growing an ornamental *Asparagus plumosus nanus* fern was also mailed to food editors as an illustration of one of the more unusual forms which asparagus can take.

The backbone of the Council's merchandising effort is the annual Asparagus Recipe Contest which this year drew more than 1,600 entries from a 22-state area. Prizes are always contributed, Seabrook Farms Company being the donor for 1963.

Other significant promotion efforts included observance of Asparagus Week (November 17-23), Council member appearances on radio and television programs, newspaper and magazine stories on Council activities, and distribution of asparagus recipe booklets through county fairs, home agents, home economists, newspaper and magazine food columns.

Research

During the 1963-64 fiscal year the Council allotted $18,100 for asparagus research at Rutgers University. A total of eight men were engaged in the following studies: (1) asparagus breeding, (2) root rot and rust pathogens, (3) post-harvest quality, (4) mechanical harvesting, (5) economics of cutting methods, (6) weed control and (7) direct seeding.

The following are the "highlights" of an 11-page report on research submitted to the Council:

A significant improvement has been achieved in rust resistance. Crosses of a selected rust-resistant male and commercial female plants showed considerably more resistance in actual field tests.

Experimental male lines yielded approximately 25 per cent more than local commercial Washington stock. Seed obtained will help establish many rust-resistant male lines during the next few years.

An unusually dark green plant is expected to contribute its desirable features to commercial strains.

Approximately 20 pounds of improved seed were produced this year on the seed plot and will be used for experimental purposes. About 100 pounds are expected to be harvested in 1964. It will be made available to New Jersey growers.

Suitable inoculation techniques have been developed for root rot studies. Emphasis has been switched to see disinfection treatment to prevent or delay introducing root rot into new nurseries.

Decay in cut asparagus is best controlled by cooling immediately after harvest with subsequent refrigeration. Control by chemicals alone is not feasible on a commercial scale.

Modifications in the mechanical harvester included a new type of cutting blade and spear pickup mechanism. High speed motion pictures taken of the unit in action permitted closer observation of cutting functions and will be helpful in expediting future progress.

Poultry Products Promotion Council

Recognizing that New Jersey, with more than 6,000,000 consumers, is the prime market of the State's poultry industry, the Council directed this year's programs accordingly.

A total of $74,020.75 was expended for paid media advertising. Of this, approximately 75 per cent was allocated in New Jersey to support this significant shift in emphasis, designed to influence local consumption.

The breakdown shows:

Radio	$35,434.84
Outdoor billboards (including production)	$17,748.99
Newspaper space (including dailies, weeklies, trade papers, and production)	$13,672.47
Television	$ 7,164.45

Support of National Organizations

The Council, following precedent and in behalf of New Jersey producers, authorized allotments to the Poultry and Egg National Board and the National Turkey Federation in support of these national consumer education organizations.

Advertising and Merchandising

Through July, August and September, 177 outdoor billboards were posted at locations throughout the State selected on the basis of high traffic, sales distribution and proximity to major production areas. These 24-sheet boards artistically presented a tremendous egg being trucked to a nearby city, lending credence to the copy, "New Jersey Seal of Quality Eggs - fresher ... by miles!" It was estimated that approximately one and one-half million people viewed these boards daily.

A special flyer, listing all of the billboard locations by counties and including a full-color reproduction of the poster, was prepared and 3,500 copies were distributed to responsible individuals at all levels of the trade. Two thousand in-store posters, identical to the billboards, added impact and carry-through from the highway to the point-of-sale.

Operation Grassroots

Commencing in the fall of 1963, Operation Grassroots spearheaded the Council's drive on the New Jersey market. Designed to influence consumers at the "grassroots," this program (and the one immediately following known as Operation Grassroots - Phase 2) was successful in expanding "at home" sales of New Jersey Seal of Quality eggs. Through the use of one-minute spots on WOR, which blankets the State, and local radio (New Brunswick, Trenton, Camden, Asbury Park, Vineland, and Atlantic City), the industry spoke directly to local homemakers, reaching an estimated audience of 3,750,000 each week for a period of 20 weeks. Wherever possible, mention of local producers or stores was included in the text used by the local announcer.

Supporting this effort was a special merchandising letter and flyer developed by the Council's staff expressly for licensed distributors, leading chain store, independent and cooperative retail organizations, and for producers and allied industry. This particular mailing consisted of 2,377 pieces.

Each station on the schedule sent merchandising letters to the retailers in its trading area.

As a result of the favorable reactions from this initial campaign, an expanded "Phase 2" program was undertaken. The logical place to expand sales, in view of the State's recently acquired deficit position, was in our own heaviest egg producing counties where shoppers and homemakers are already convinced of the freshness inherent in New Jersey eggs.

Phase 2 was reinforced by 250-line advertisements which appeared every Wednesday from January through April in 10 leading daily newspapers, covering the heavily populated areas of the State.

A new four-color counter card was developed for point-of-purchase use. This attractive easel featured omelets and pads of tear-off recipes. This material received broad acceptance and display because of its emphasis on egg usage.

During May and June, paid media advertising consisted of spot announcements on WOR radio and WNBC-TV, New York. With the new rendition of the Seal of Quality, it was important to provide the greater visibility and exposure to consumers provided by these media.

Public Relations

In the field of public relations, the Council continued to expand its contacts with food editors, home economics teachers and food communicators, using as base recipes, photographs and other printed materials from the Poultry and Egg National Board.

Contests

The State's participation in the Chicken Recipe and Egg Cooking Contests was conducted by the Council staff within the framework of the administrative budget.

Over 275,000 entry blanks for both contests were placed at major food retail outlets throughout the State. Chicken recipes were judged through the cooperation of the Mercer County Extension office, Public Service Electric and Gas Company and the Trenton Times. The Information Division prepared two news releases in connection with this event.

Reviewing the successful format of last year's egg cooking contest, the staff of the Public Service Electric and Gas Company's Home Service Center in Newark agreed to cooperate with the Council again this year. Recipes were judged to determine the eight finalists. On June 3, the cook-off was held in Newark in conjunction with a food editors' luncheon and an afternoon program to which the public was invited. Over 500 persons attended the all-day session. The New Jersey senior and junior winners will participate in the national finals.

Excellent publicity accrued from these events.

Other Public Relations Activities

Promotion Matters, the Council's report to producers and the industry, was issued three times and sent to a mailing list of approximately 2,200.

In cooperation with the Poultry and Egg National Board, the Council participated in the local publicizing of March Egg Month and Eggtober, two of the industry's annual events. An opportunity for excellent public relations was afforded the State's poultry industry when, for the first time, PENB held its national annual meeting in Philadelphia. The secretary of agriculture presented a Tercentenary Medallion to PENB, on behalf of the State's poultry industry, in recognition of outstanding consumer information programs. An attractive display, illustrating how New Jersey conducted the Egg Cooking Contest, brought favorable comments at the three-day sessions.

The Council placed special advertisements in the Tercentenary editions of the Trenton Times and Atlantic City Press. Editorial copy describing the importance of the State's poultry industry and its marketing program accompanied both insertions.

Film: "This Is Your Egg"

The Council was presented with five copies of a new film, "This Is Your Egg," produced by the Poultry and Egg National Board. The donor was Jersey Egg and Poultry Producers, Inc. The Council will make these films available on a free-loan basis to schools, service clubs, and civic organizations.

Turkey Marketing

The Seal of Quality turkey marketing program was conducted for the seventh consecutive season. In cooperation with the Division of Animal Industry and the State Department of Health, 20 growers with a combined crop of approximately 90,000 birds participated in the program.

In addition to providing growers with Seal of Quality tags indicating wholesomeness as well as quality, the Council inserted advertisements in local newspapers listing the participating farms in the respective areas. Local radio spots rounded out the program.

Turkey cooking leaflets, obtained through the National Turkey Federation, were made available to food editors, home demonstration agents and to individuals making direct requests. A television program describing the Council's support of New Jersey Seal of Quality turkeys was aired just previous to the holiday season.

Fieldmen Activities

The Council fieldmen distributed all point-of-purchase material during the year and provided other merchandising support to Council programs. This was in addition to their primary assignments on farms, conducting egg quality surveys for certification for packing under the Seal of Quality. It is difficult to overestimate the work of the field staff in lending technical

assistance to producers and their marketing organizations, and in creating excellent public relations for the Department.

The following summary will, in part, serve as an indication of the broad scope of the fieldmen's activities during the year: On-farm surveys, 126; visits to producers, 933; visits to licensed distributors, 529; visits to egg dealers, 282; visits to feed dealers, 86; visits to turkey growers, 38; visits to county agents, 56; visits to retail outlets, 615; visits connected with the distribution of promotional material, 113. Total visits were 2,778. In addition to these assignments, the fieldmen also assisted in setting up and manning various Department exhibits and displays, including those at the county fairs.

Conclusion

This year was marked by an expansion of sales in identified Seal of Quality cartons. Many retailers had the Seal of Quality imprinted on their cartons. This is obviously an advantage to the marketing program because imprinting provides greater visibility for the seal and, in effect, ties the owner of the carton closer to the program.

White Potato Industry Council

The New Jersey White Potato Industry Council seeks to improve the acceptance of New Jersey white potatoes through trade contacts, public relations, advertising and research.

One of the principal activities is the maintenance and development of trade contacts. The Council manager calls from time to time on head produce buyers of chain store headquarters, wholesaler sponsored voluntary chains, retailer owned cooperative chains, wholesale houses and brokers who are in a position to purchase New Jersey potatoes.

These visitations have improved the image of New Jersey potatoes and have overcome the adverse feeling that many had had for the product. Furthermore, these personal visits have resulted in an increased acceptance of New Jersey potatoes in markets where they were not used prior to the establishment of the Council.

A recent field trip by the manager through Maryland, Virginia, Tennessee, North Carolina and South Carolina, proved that New Jersey potatoes are well accepted. Buyers who had handled New Jersey potatoes reported exceptionally good quality.

The Council has engaged in a variety of promotional and public relations events. The annual potato buyers' dinner provides an opportunity to bring potato buyers closer to the industry. Trade representatives at the 1963 affair came from 17 states.

During the fall of 1963, the Council's first outdoor billboard campaign was conducted. One hundred and fourteen full-color, 24-inch sheet posters featuring New Jersey potatoes and announcing the new crop were seen by 1,250,000

people daily. They were placed at high traffic shopping route locations throughout the State. The message on the poster was precise. It said "Fresh New Jersey Potatoes, Delicious - boiled, fried or baked."

Price cards with the poster design were produced and distributed to leading chain stores and other trade outlets with the request that they feature New Jersey potatoes.

Trade contacts were made by the manager who explained the comprehensive promotion program and invited the cooperation of buyers and merchandisers.

Full cooperation was provided. The Great Atlantic and Pacific, Acme, Grand Union, Good Deal, First National and many independent stores arranged outstanding displays of consumer-packed New Jersey potatoes during the poster showing.

Millions more heard radio commercials every week featuring fresh crop, delicious, nutritious New Jersey potatoes. These broadcasts were by the "McCanns at Home Show," WOR, New York, and by the "John Trent's Housewives Protective League Show," WCAU, Philadelphia, during the months of August and September.

The manager appeared on the Bill Bennett Show, WCAU-TV, Philadelphia, to talk about the new harvest and to laud the quality of our potatoes.

The brochures, Potatoes in Your Reducing Diet and Potatoes for Our Growing Youth, are still very popular with the public. A large number of requests were received as a result of mention on radio and TV, and in newspapers and trade journals. These brochures were also distributed where the promotion councils or Department of Agriculture maintained an exhibit at New Jersey county fairs and other events.

The Council provides a financial grant every year to the College of Agriculture, Rutgers University, for potato research. The research programs for the 1963 season consisted of variety testing and cooking quality studies.

The manager was invited to give a report on the accomplishments of the Council at the National Potato Council meeting in Denver, Colorado, in November 1963. The report was very well received. In it, the manager stated that growers have contributed to the success of the marketing program through (1) extension of the marketing season, (2) construction of potato storage, and (3) provision of new services, such as consumer size packages and washing facilities.

Collection of Promotion Taxes

Apple Industry Promotion Tax

The act which created the Apple Industry Council provides for a tax of $0.03 on each bushel of apples sold for marketing as fresh apples and $0.03 per hundredweight on apples sold for processing other than for cider or juice. The tax is collected four times a year, on the 15th of July, October, January and April on apples sold during the previous three-month period.

The number of orchards in New Jersey has decreased during the past five years, causing a decline in the amount of income from this tax. Also, the yield from this tax varies with the size of the crop and the proportion of apples sold for processing. The collections are summarized below:

Collection Year	Fresh Market	Processed	Total
July 1, 1959-June 30, 1960	$47,518.14	$11,323.38	$58,841.52
July 1, 1960-June 30, 1961	33,709.24	9,198.10	42,907.34
July 1, 1961-June 30, 1962	36,573.16	10,703.64	47,276.80
July 1, 1962-June 30, 1963	42,152.14	10,236.55	52,388.69
July 1, 1963-June 30, 1964	29,200.95	7,297.13	36,498.08 [1]

[1] Collections incomplete, total estimated at $42,000.

Asparagus Industry Promotion Tax

Five complete collection seasons have passed since a law was instituted in 1959 imposing a tax of $0.002 per pound of pay-weight on asparagus sold for processing and $0.02 per standard crate or equivalent on asparagus sold for fresh market.

The collections are summarized below:

Season	Fresh Market	Processed	Total
1959	$15,179.64	$74,240.42	$89,420.06
1960	16,132.84	71,987.42	88,120.26
1961	13,271.52	69,256.22	82,527.74
1962	11,946.81	63,964.09	75,910.90
1963	12,502.38	72,159.59	84,661.97

From figures available at the time of this report, it appears that the amount to be collected on the 1964 crop will be less than the amount collected on the 1963 crop.

Poultry Products Promotion Tax

Since 1957 when this tax on poultry feed sold, delivered or used in New Jersey was established, there has been a steady decline in the amount collected. This decline is the result of shrinkage in the poultry industry in New Jersey. Long periods of low prices for eggs and poultry have forced many poultry farmers out of business.

This tax of $0.01 per hundred pounds of poultry feed is due on or before February 1 and August 1 of each year and covers the six-month period immediately preceding January 1 and July 1. The following table summarizes the collections for the past five years:

Taxing Period	Amount Collected
January 1 - June 30, 1959	$83,582.17
July 1 - December 31, 1959	80,417.05
January 1 - June 30, 1960	70,179.30
July 1 - December 31, 1960	72,482.80
January 1 - June 30, 1961	67,123.82
July 1 - December 31, 1961	68,104.84
January 1 - June 30, 1962	62,565.20
July 1 - December 31, 1962	63,180.10
January 1 - June 30, 1963	58,448.03
July 1 - December 31, 1963	56,151.48[1]

[1] Collections incomplete.

White Potato Industry Promotion Tax

A tax of $0.05 per hundred pounds on seed potatoes planted in New Jersey is due on or before August 1 in each year for the 12-month period immediately preceding July 1. This year is the first full year of collections since the tax program was amended from two collections a year to one.

The following table shows collections for the past five years:

Taxing Period	Amount Collected
1959 season	$15,409.08
1960 season	15,555.60
1961 season	17,065.56
1962 season	14,897.93
1963 season	14,720.15

The last two years show a decrease in the amount of tax collected, indicating a slight reduction in the acreage planted.

Merchandising Activities

Sweet Corn

During the sweet corn marketing season, the merchandising staff helped distribute newly developed marketing aids. These materials consisted of a New Jersey sweet corn banner to be used near corn displays and a bag stuffer imprinted with sweet corn cooking instructions. This bag stuffer was placed in each customer's bag of corn by the retail sales people.

These promotional materials were intended primarily for use at roadside and farm retail sales outlets handling only the highest quality New Jersey sweet corn. County agricultural agents in the commercial sweet corn producing areas cooperated by distributing them to roadside market operators and farmers who make retail sales. Additional distribution was made by the merchandising staff to a small number of high volume New Jersey sweet corn handlers in other areas.

Chain Store Merchandising Aids

Three special promotional "flyers" were prepared at the request of a major food chain to advise its individual store managers of the availability of New Jersey apples, sweet corn, blueberries and peaches. Three lots, consisting of 1,200 copies of each leaflet, were prepared by the Department's staff and delivered to regional produce merchandisers for distribution. The chain headquarters personnel felt that this effort was of definite help in keeping individual store produce managers informed of the availability of local produce and of increasing its movement at the retail level.

Apples

The Department merchandising staff assisted the New Jersey Apple Industry Council on several promotion projects. A major effort consisted of contacting chain store buyers and merchandisers concerning the special billboard promotion of New Jersey Stayman apples. Following initial calls to inform chain personnel of the promotion, additional visits were made to deliver special tie-in point-of-purchase materials to each chain store headquarters in the immediate marketing area.

The merchandisers also assisted the Apple Council manager with displays at the annual New Jersey Education Association Convention and at a series of homemakers' meetings scheduled throughout the State by the New Jersey Public Service Electric and Gas Company.

Asparagus

In conjunction with the New Jersey Asparagus Council's fresh market promotion program, the merchandising staff helped distribute asparagus merchandising kits to food chain and large produce broker organizations in the metropolitan New England, New York, New Jersey, Philadelphia, Baltimore and Washington, D. C., marketing areas. The more than 10,000 kits were warmly received by the merchandising and retail people.

Considerable effort was devoted to development of a new package for fresh New Jersey asparagus. Consumers are indicating a preference for a package smaller than the traditional 2½-pound bunch.

Roadside Markets

One of the Department's farm products marketing representatives devoted most of his time during the summer months to a series of calls at New Jersey's roadside markets in attempts to upgrade these prime outlets for New Jersey farm products. Suggestions were made concerning facilities and practices including packing, refrigeration, display techniques, pricing, combination deals, signs, training of clerks, and provision of recipes and point-of-sale material.

Market Analysis Work

During the year an attempt was made to analyze the market for New Jersey asparagus, to select several cities into which only limited quantities

were moving, and to determine the reasons why larger quantities were not being sold. One of the Department's representatives made a series of calls in Baltimore, Md., Washington, D. C., and Cincinnati, Columbus and Cleveland, Ohio. He interviewed produce handlers in these cities and obtained many valuable suggestions on how to improve the acceptance of New Jersey asparagus. Some information was also obtained from New Jersey asparagus processors concerning the acceptance of canned and frozen asparagus in southern cities where fresh market asparagus is not sold in any quantity.

Sales to the Armed Forces

Considerable effort was devoted to acquainting the personnel of the Defense Subsistence Supply Center with the wide variety of fine products available from New Jersey and to increasing sales to this agency, which buys food for all branches of the armed services. Personnel were invited to tours of New Jersey farms and processing plants and arrangements were made to have them meet New Jersey producers and brokers interested in supplying produce to the armed forces. A field office was established in Bridgeton to serve as a headquarters for military field buyers interested in procuring lettuce and other spring and fall crops in that area. This cooperation resulted in the purchase of both a larger quantity and a larger variety of New Jersey products for use by the armed forces.

Marketing Facilities and Transportation

The marketing facilities and transportation specialist has been occupied on almost a full-time basis with the New Jersey Public Market Commission. He serves as the designee of the secretary of agriculture to the Commission and has been assisting the executive director, the engineering concerns and legal advisors in preparing for the bond sale and actual construction of the proposed public market project.

During the early part of the year the major activity was contacting members of the meat and produce trade and others relative to their interest in the market. The last several months were devoted to preparation of the Bond Prospectus and Official Statement of the Commission. These documents are nearing final form.

Through the efforts of the marketing facilities and transportation specialist, a liaison has been maintained with members of the Transportation and Facilities Research Division, Agricultural Research Service, United States Department of Agriculture. They have been of great assistance to the project. The specialist also represented the Public Market Commission at the annual meeting of the National Produce Market Managers in Louisville, Ky., in April.

The State Emergency Food Advisory Council is charged with the responsibility of developing a plan of operation for feeding the population of New Jersey in case of nuclear attack. Such a plan would also function in case of natural disasters. The secretary of agriculture, who is chairman of this group, has appointed as his designee the marketing facilities and transportation specialist, who has worked closely with the Department of Civil Defense in the development of the plan for New Jersey.

Work with the Newark Urban Renewal Meat Dealers Organization has been continued in their quest for new facilities.

The Department was represented at meetings of the Garden State Branch of United Fresh Fruit and Vegetable Association and at meetings to explore the feasibility of a Farmers Market on the new Atlantic City Expressway.

The secretary of agriculture was represented by the marketing facilities and transportation specialist at the annual meeting of Farm Credit in Ithaca, N. Y., in August, and the National Association of Food Chains in New York City in October.

DIVISION OF PLANT INDUSTRY

F. A. Soraci, Director

BUREAU OF ENTOMOLOGY

Nursery Inspection

During the year, 1,279 nurseries were inspected for issuance of the nursery certificate of this Department. This is an increase of 16 over last year. Infestations, that required control measures before qualification for certification were found in 211 nurseries, 118 less than last year. The infestations most commonly found were as follows:

Insect	No. of Finds
Spruce gall aphids, Chermes abietis and Chermes cooleyi	71
Oystershell scale, Lepidosaphes ulmi	57
Red spider mites, Tetranychus telarius and Metatetranychus ulmi	49
Bagworm, Thyridopteryx ephemeraeformis	48
Holly leaf miners, Phytomyza ilicis, P. ilicicola, P. weidhaussi	42
Andromeda lace bug, Stephanitis globulifera	38
Euonymus scale, Unaspis euonymi	32
Azalea lace bug, Stephanitis pyrioides	23
Birch leaf miner, Fenusa pusilla	23
European pine shoot and pine tip moths, Rhyacionia buoliana and R. frustrana	23
Borers (misc.)	20
Lace bugs (misc.)	20
Pine leaf scale, Phenacaspis pinifoliae	19
Webworms (misc.)	18
Juniper scale, Diaspis carueli	17
Mealybug (Taxus), Pseudococcus cuspidatae	15
Pine bark aphid, Pineus strobi	15
Aphids (misc.)	14
Sycamore lace bug, Corythucha ciliata	12
Lecanium scale, Lecanium fletcheri	12
White pine weevil, Pissodes strobi	9

Below is a statistical comparison of nursery plantings between the calendar years 1953 to 1963:

Year	Number of Nurseries	Total Acreage	Evergreens	Flowering Trees & Shrubs	Deciduous Shade Trees	Broadleaf Evergreens
1953	586	5,774	2,571	1,344	478	716
1958	915	7,451	3,310	1,453	905	968
1963	1,253	10,075	5,103	1,332	1,105	1,284

Rate of Increase
1953-1958 and 1958-1963

Year	Increased Number of Nurseries	Per Cent Increase	Increased Total Acreage	Per Cent Increase	Increased Evergreen	Per Cent Increase	Increased Flowering Trees & Shrubs	Per Cent Increase	Increased Deciduous Shade Trees	Per Cent Increase	Increased Broadleaf Evergreens	Per Cent Increase
1953-58	329		1,677		739		109		427		252	
1958-63	338		2,624		1,793		-121		200		316	
Total Increased	667	114%	4,301	74%	2,532	98%	None -12	None -0.9%	627	131%	568	80%

Dealers Certificates

Certificates were issued to 385 dealers in nursery stock, an increase of seven over last year. Dealer certification is granted only when the Department is satisfied that the nursery stock obtained from listed sources is certified.

During the spring and fall, 387 inspections were made of dealer establishments to determine whether held-over stock was free of plant pests and diseases. Infested plant material requiring control measures was found on the premises of nine dealers.

Special Certificates

In accordance with regulations of other states and foreign countries, special certificates were issued to 688 New Jersey residents desiring to ship plant material out of the State.

Canadian Certificates

A total of 191 special certificates was issued for the movement of plant material to Canada, in accordance with the requirements of that country.

Special Corn Borer Certificates

Seventy-five special corn borer certificates were issued for the shipment of herbaceous plants into states having such requirements.

Domestic Inspections

Fifty-one inspections were made of plant materials shipped into New Jersey from other states. Such inspections are made as a check on the efficiency of the inspection services of other states. No infested plant material was found.

Special Request Inspections

Sixty-four inspections were made at the request of New Jersey residents desiring information about outbreaks of insects and diseases affecting their premises.

Winter Nursery Inspections

During the winter months, the premises of 568 nurserymen were inspected for the presence of overwintering insects. Control measures were required at 80 establishments.

Gypsy Moth Inspections

During the course of the winter nursery inspection work, all woodland areas immediately adjacent to the nurseries were scouted for gypsy moth egg masses. One egg mass was found and cleanup measures were taken.

Christmas Tree Inspections

During December, 196 dealer establishments were inspected to check whether Christmas trees and other holiday greens, originating in areas under gypsy moth quarantine, carried proper certification. Two dealers found to have uncertified trees were reported to the United States Plant Pest Control Division.

Geranium Plume Moth Inspections

During February and March, the premises of 49 geranium growers were inspected for the presence of plume moth. Suspects collected at two establishments were forwarded to the United States Entomology Research Division Station in Maryland for confirmation.

Post-Entry Quarantine Inspection

During the year, 139 inspections were made of plant materials imported under permit from foreign countries and growing under the supervision of this Department.

PLANT MATERIAL IMPORTED UNDER POST-ENTRY QUARANTINE DURING 1963-64, BY GENUS

Genus of Plants	Number Imported
Acer	575
Aesculus	177
Anthurium	1,000
Artocarpus	3
Berberis	50
Castanea	5
Corylus	800
Diospyros	32
Ilex	2
Juniperus	503
Quercus	5
Rosa	35
Total	3,187

PLANT MATERIAL RELEASED FROM POST-ENTRY QUARANTINE DURING THE YEAR, BY GENUS

Genus of Plants	Number of Plants Originally Imported	Number of Plants Released
Acer	1,571	1,124
Aesculus	50	0
Berberis	200	143
Euonymus	100	100
Juniperus	512	462
Quercus	25	0
Ribes	35	34
Rosa	52	47
Totals	2,545	1,910

Gypsy Moth Control

Four separate operations are performed during the year for gypsy moth control. Two forms of survey, in addition to the quarantine and control operations, are necessary. The various life stages of the insect determine the timing of each operation.

Trapping

A cooperative State-Federal gypsy moth trapping survey was conducted throughout the northern one-third of the State. Both five-eighths and seven-eighths mile grid patterns were used for the sex-attractant trap placement. The five-eighths mile grid was utilized in areas of recent gypsy moth history; the seven-eighths mile grid in adjacent areas to the south. This seven-eighths mile grid was also employed in an area which included the Sourland Mountains. A number of State parks and forests were also trapped during the survey.

The trapping operation, initiated on June 24, 1963, was completed in mid-September. In all, 6,092 traps were employed for the survey. A total of 261 male moths was captured at 155 trap sites. The breakdown is as follows:

County	Trap Sites	Total Moths
Bergen	1	2
Morris	11	15
Passaic	24	31
Somerset	27	54
Sussex	85	142
Warren	7	17
Totals	155	261

Scouting

Scouting for egg masses was initiated in late December and continued to mid-April. The survey was conducted around most of the 1963 attracting trap sites. Nine separate infestations were discovered in the 2,900 woodland acres scouted.

Quarantine

A limited amount of quarantine work was performed during November and December. Inspections were made of vegetation surrounding lumber and sawmill operations located near any of the 1963 attracting trap sites.

Incoming shipments of Christmas trees were inspected for conformance to certification requirements. Inspections were also made at wholesale, retail and trucking centers. In addition, a road check of vehicles transporting Christmas trees was made in the Mahwah area of Bergen County. All materials were either accompanied by certification or did not require certification.

Control

The control program against the young larvae of the gypsy moth was started on May 18, 1964, and was completed on June 5. Eight separate control areas, totaling 41,840 gross acres, were treated by aircraft. The treatment rate was one pound of carbaryl (Sevin) plus a sticker, dispersed in one gallon of water per acre. Only lands situated on the southern and western extremities of the infested area were treated. The breakdown by county is as follows:

County	Gross Acres
Sussex	34,499
Warren	6,086
Somerset	1,255
Total	41,840

The Plant Pest Control Division of the United States Department of Agriculture cooperated fully in the spray program. The aerial treatment was financed under Federal contract. The New Jersey Department of Agriculture absorbed a major share of the cost of labor and transportation.

Since it was impossible to spray all of the sites in which gypsy moths were captured, a biological control program was planned for those areas not sprayed. Sex-attractant traps would be dropped from the air over 33 different locations where male moths were captured in 1963. This area would cover approximately 94,000 acres. Traps would be dropped at the rate of 260 traps per square mile, a dispersal rate equal to a trap every one-sixteenth of a mile. This drop would be repeated every three weeks, into August, with a limited number of traps placed by hand as indicators.

The trap is similar to those used for survey. It consists of a cardboard tube approximately three inches long and two inches in diameter, with an entrance hole at each end. These holes are fitted with a plastic baffle insert which allows the moth to enter but not escape. Tanglefoot adhesive is applied to the inner walls of the trap. A small cotton wick to which the sex-attractant is applied is placed on the tanglefoot.

This phase of the control program got under way on June 22. By the end of the month, a total of 26,000 traps had been dropped from a United States Department of Agriculture plane.

European Chafer Control

The 1963 survey for the European chafer was mainly conducted in various areas of Hudson, Essex, Union and Middlesex counties. Visual scouting was used in conjunction with black light and chemical attractant traps.

Interchanges and service areas along both the New Jersey Turnpike and the Garden State Parkway were also surveyed. Additional traps were placed at various locations throughout the State. The trapping survey, initiated on June 4, was terminated on July 29. The visual survey started on June 10 and was completed on July 18.

After completion of the survey program, it was evident that spot infestations still existed in the Hudson County area. Nine adult chafers were collected at three new infestation sites as follows:

Date	Location	No. of Chafers	Type of Survey
June 19	Hudson County Mental Hospital, Secaucus	1	Black light trap
June 26	Riverview Park, Jersey City	2	Visual
June 19, June 23	Washington Park, Union City	6	Visual and black light trap
	Total	9	

Chemical treatment of the newly infested areas was initiated in mid-September. Locations in Jersey City, Union City, Hoboken and Secaucus were treated at the rate of 30 pounds of 10 per cent granular dieldrin to the acre.

The program was temporarily halted on November 1, because a number of English sparrows and pigeons in two of the Hudson County parks died. Specimens were submitted to three separate State laboratories to ascertain the cause of the mortality. Three different types of bird diseases were reported in conjunction with varying residuals of dieldrin. It was believed that a combination of the bird diseases plus the insecticide caused the deaths.

In mid-November hand treatment was started in Secaucus. Work was first conducted on the grounds of the Hudson County Mental Hospital. Residential and open areas adjacent to the hospital were also treated.

The breakdown of the European chafer control program was as follows:

City	Gross Acres	Net Acres
Union City	223	71
Jersey City	572	183
Hoboken	177	57
Secaucus	180	123
Totals	1,152	434

As participants in this cooperative program, the United States Department of Agriculture paid for the insecticide and supplied technical help; the New Jersey Department of Agriculture absorbed the major portion of personnel costs and transportation.

Khapra Beetle

A shipment of 100 bundles of channel steel and 85 lifts of flat steel from Belgium was treated after khapra beetle was found on the carrying ship. This material had been delivered to Raritan, prior to discovery of the insect pest on the carrier.

The consignee was notified and company officials arranged for fumigation of the shipment with methyl bromide by commercial exterminator, under supervision of State and Federal personnel.

Blueberry Plant Certification

Certification of blueberry plants and cutting wood for freedom from stunt disease and other viruses is based on two inspections. Cutting beds, nursery plants, and enough mother plants to supply cutting wood are inspected in the spring and again in the fall. Plants showing symptoms of the various virus diseases are tagged by inspectors of this Department and must be removed by the grower.

During the calendar year 1963, 16 growers entered plantings for certification. After the fall inspection, 78,957 mother plants, 850,379 nursery plants and 1,499,870 rooted cuttings were certifiable. During both inspections, 590 diseased plants were found. Thirty-two were infected with stunt disease, five, with mosaic, and 533 with ringspot.

NUMBER OF CERTIFIABLE BLUEBERRY PLANTS
1962-63

No. Growers		Mother Plants		Nursery Plants		Rooted Cuttings	
1962	1963	1962	1963	1962	1963	1962	1963
19	16	99,421	78,957	1,703,452	850,379	1,890,600	1,499,870

INCIDENCE OF VIRUS DISEASE, 1962-63

	Mother Plants				Isolation Plants			
	Spring		Fall		Spring		Fall	
	1962	1963	1962	1963	1962	1963	1962	1963
Stunt	8	16	3	4	20	7	1	5
Mosaic	0	0	0	3	2	2	1	0
Shoestring	0	0	0	0	0	0	0	0
Ringspot	0	0	0	421	0	0	0	132
Totals	8	16	3	428	22	9	2	137

Red Stele Disease of Strawberries

During April, strawberry plantings of 27 growers, representing a total of 97.88 acres, were inspected.

County	No. Growers	Acreage
Atlantic	10	41.75[1]
Burlington	1	7.00
Camden	1	2.00
Cape May	4	4.13
Cumberland	1	24.00
Gloucester	2	4.00
Hunterdon	1	1.50
Mercer	3	7.00
Monmouth	2	4.00[1]
Sussex	1	1.50
Union	1	1.00
Totals	27	97.88

A total of 92.63 acres was certified to be free of red stele disease.

Japanese Beetle Quarantine Enforcement

The cooperative Federal-State program involves the year-round certification of regulated materials for shipment to points outside the Japanese beetle area. In addition, summer regulatory measures are in effect to control the spread of adult beetles by common carriers and hazardous materials.

The major activity within New Jersey is the certification of soil and plants throughout the year. A total of 2,370,129 plants was certified, after treatment or by inspection. In addition, 281 cubic yards of potting soil were treated, as well as 12,892,760 square feet of surface soil. The estimated value of all materials certified was $2,022,023. This work required 1,959 calls to 1,921 commercial establishments and private individuals.

In addition, particular emphasis was given to major airports, both military and civilian, from which jets go to points throughout the United States and to Europe. Where adult beetle hazards are encountered, planes are treated. A total of 262 flights was treated with 80 per cent micronized DDT dust. In order to hold future airplane treatments to a minimum, residual soil insecticides were applied to McGuire Air Force Base, and to areas of Fort Dix, Newark and Teterboro airports.

Golden Nematode

A total of 1,009 soil samples, representative of 3,849 acres of New Jersey potato lands, was collected throughout the summer and fall of 1963 to determine whether or not this important pest of potatoes is present in New Jersey. All samples were processed during December and January at Trenton. No golden nematode cysts were found.

[1]Three plantings of 5.25 acres, rejected.

During the laboratory examinations other nematode cysts were selected from 69 collections and forwarded to the United States Department of Agriculture Golden Nematode Laboratory, Hicksville, Long Island, New York, for determination. These proved negative for soybean cysts nematode or other important plant pests.

GOLDEN NEMATODE SURVEY

County	Properties	Acres	Samples Collected
Atlantic	2	30	15
Burlington	24	796	195
Camden	5	135	27
Cape May	1	6	10
Cumberland	15	395	145
Gloucester	3	120	30
Mercer	28	612	137
Middlesex	25	398	135
Monmouth	35	1,087	235
Salem	8	270	80
Totals	146	3,849	1,009

Bee Culture

Inspection

Frame by frame inspections were made in 668 apiaries. A total of 7,150 colonies was inspected, of which 229 colonies in 84 apiaries were infected with American foulbrood. In 83 apiaries, 390 colonies were found to be infected with European foulbrood. The incidence of American foulbrood was 3 per cent; that of European foulbrood, 5.4 per cent.

Of the apiaries inspected, 550 were maintained by registered beekeepers. The registered beekeepers had 6,452 colonies; the new beekeepers operated 698 colonies.

Inspections were made in 20 counties during the fiscal year. Scouting for new and abandoned apiaries was conducted during the winter months in an effort to locate and eradicate American foulbrood.

Eighty-five colonies were burned by the inspectors because of failure of the beekeepers to comply with control orders. Eight certificates of transfer and six queen-rearing certificates were issued. A total of 295 nuclei was inspected in queen-rearing apiaries.

Survey work to locate apiaries in areas to be sprayed for gypsy moth in Somerset, Warren and Sussex counties was started April 7, 1964. The beekeepers were notified and their colonies moved approximately three miles outside of the sprayed areas for a seven-day period. Approximately 100 colonies were moved out of the spray areas and moved back to their original location between April 22 and June 16.

Condition of Colonies

Bees collected some nectar during July 1963, in spite of dry weather conditions. Hot dry weather continued throughout August, making it inadvisable to open colonies many times due to robber bees. Colonies throughout the State had consumed most of their surplus nectar for food. Goldenrod and aster started to bloom, but little nectar was brought in by the bees during September.

During October purple and white aster yielded a surplus of nectar, supplying colonies in aster areas with enough food for winter. The weather was fair during December, January and February, giving colonies sufficient time for cleansing flights and ample time to transfer their clusters to new positions in the food chambers. Colonies wintered well throughout the State. Inclement weather conditions during April restricted colonies to some extent. Nectar secretion, however, was good during May and June.

The following is a tabulation of work performed during the year:

SUMMARY OF BEE INSPECTIONS

1963 - 1964

County	Apiaries Registered	Apiaries New	Colonies Registered	Colonies New	Nuclei	Crossed Comb	American foulbrood Apiaries Registered	American foulbrood Apiaries New	American foulbrood Colonies Registered	American foulbrood Colonies New	European foulbrood Apiaries Registered	European foulbrood Apiaries New	European foulbrood Colonies Registered	European foulbrood Colonies New	Colonies Burned	Microscopic Determination Afb	Microscopic Determination Efb	Microscopic Determination Neg.
Atlantic	14	...	255	...	...	...	6	...	14	...	5	...	19	...	10	...	...	...
Bergen	3	...	29	...	...	...	1	...	2	...	...	...	...	...	14	...	...	...
Burlington	61	5	937	51	...	6	10	1	54	1	13	1	118	8	25	1	2	...
Camden	34	9	418	55	25	...	3	1	3	1	8	1	39	3	...	...	1	...
Cape May	13	...	128	...	83	...	1	...	1	...	...	...	...	...	1	...	...	...
Cumberland	22	...	651	...	...	...	2	...	2	...	10	...	117	...	...	...	7	...
Essex	40	7	166	16	...	...	3	1	4	2	...	...	...	...	...	1	...	5
Gloucester	18	5	153	46	...	...	...	1	...	3	...	...	...	...	...	...	...	...
Hudson	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hunterdon	61	9	743	31	187	...	1	...	5	...	1	...	3	...	...	2	1	...
Mercer	16	3	302	15	...	...	6	...	19	...	6	...	10	...	11	1	...	...
Middlesex	13	11	67	39	...	...	4	...	4	...	1	...	5	...	...	...	...	...
Monmouth	46	8	649	49	...	5	4	...	15	...	10	...	25	...	...	...	2	...
Morris	44	22	268	84	...	...	6	5	22	5	...	...	...	...	1	...	...	2
Ocean	11	7	171	62	...	...	5	1	8	1	5	...	44	...	...	...	...	...
Passaic	5	2	34	12	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Salem	30	5	537	136	...	...	...	...	...	...	2	...	8	...	...	...	...	...
Somerset	37	10	257	59	...	...	11	1	32	1	...	...	...	...	8	...	...	...
Sussex	27	4	307	11	...	...	5	...	17	...	...	...	...	...	5	...	...	...
Union	14	7	107	27	...	...	...	1	...	8	...	...	...	...	8	...	...	...
Warren	41	4	273	5	...	...	3	...	4	...	...	...	...	...	2	...	...	...
Totals	550	118	6,452	698	295	11	72	12	207	22	61	2	388	11	85	5	13	7

Certificates of transfer issued: 8

Queen-rearing certificates issued: 6

Forest Pest Survey

Red Pine Scale Control

Special surveys for red pine scale, Matsucoccus resinosae, were conducted this year in Bergen, Passaic, Morris and Sussex counties.

In addition to the Department's efforts, district foresters of the Department of Conservation and Economic Development cooperated in maintaining a constant vigilance for this pest in each of their assigned forest districts.

Surveys this year resulted in the removal of 27 acres of scale-infested red pine on the Wanaque Watershed (Bergen County). In the Borough of Ringwood (Bergen County), 18 property owners had 60 scale-infested trees which were promptly cut and destroyed.

To date, red pine scale has not been found in areas other than those where previous infestations have occurred.

New Jersey Forest Pest Detection Program

The newly initiated forest pest detection program is being conducted as a cooperative effort between the New Jersey Department of Agriculture, the New Jersey Department of Conservation and Economic Development, and the United States Forest Service. The primary objective of the program is to get better, more complete information of injurious forest pest populations in the State. Such information will permit evaluation, prediction, and consequently prevention of undue damage and loss to forest resources as a result of insect and disease outbreaks.

This new pest detection program is financed by a cost-sharing agreement between the United States Forest Service and the State. The State is allotted up to $15,000 from the Forest Service for pest detection work, provided expenditures for this program exceed $30,000. New Jersey should get the full allotment.

The work plan under this agreement is basically a three-point program of aerial detection, ground detection through the establishment of permanent observation plots, and finally application of control measures. All parts of this work plan were fulfilled this year and have been incorporated into this forest pest survey report.

A forest pest training session was held on May 8 to familiarize district foresters and other resource managers with the various forest pest problems commonly found in the State. Instructors at the session included members of the Division of Plant Industry, the Department of Conservation and Economic Development, and the United States Forest Service.

Summer Defoliation

Major Insect Pests

(1) Orange-striped Oakworm-Anisota senatoria

A large outbreak of this insect pest occurred during August and

September in the southeastern part of New Jersey. Thousands of acres of oaks were severely defoliated in parts of southern Burlington and Ocean counties and in the northeastern part of Atlantic County.

(2) White Pine Weevil-Pissodes strobi

Weeviling in the northern counties in white pine plantations has been suffered by one out of every ten trees. This damage level is considered to be serious, since the white pine weevil favors the tallest and most vigorous growing trees. Weeviling in the southern counties on white pine is practically nonexistent.

Other Insect Pests

Other insects found causing some minor damage to hardwoods included the Asiatic oak weevil, Cyrtepistomus castaneus, on oak; birch leaf miner, Fenusa pusilla, on birch; the fall webworm, Hyphantria cunea, on ash and walnut; tulip tree scale, Toumeyella liriodendri, on tulip poplar; and the locust leaf miner, Chalepus dorsalis, on black locust.

Insects found causing some damage to softwoods include the pine needle scale, Phenacaspis pinifoliae, on red pine; red-headed pine sawfly, Neodiprion lecontei, on pitch and Scotch pine; and the pine tip moths, Rhyacionia rigidana and Rhyacionia frustrana, on pitch and Virginia pines.

Spring Defoliation

This year marked the first time aerial sketch mapping of defoliated areas was used in detecting injurious forest pests. This technique proved to be of great value in determining the location, size and intensity of insect outbreaks during the spring defoliation period.

Major Insect Pests

(1) Oak Leaf Roller-Croesia semipurpurana

This insect pest has undoubtedly been the most serious hardwood defoliator in the State. Oak leaf roller larvae, and later the moths, were found active in varying degrees of intensity throughout most of the oak stands in the State, but were especially numerous in the northern half. Some 41,470 acres, mostly in the Watchung, Sourland and Kittatinny mountains, were defoliated.

In areas where Sevin was used to control the gypsy moth, Porthetria dispar, there was good control of the oak leaf roller instar larvae, but the spray was applied too late to prevent serious defoliation.

(2) Fall Cankerworm-Alsophila pometaria

This insect was found in small scattered populations throughout most of the State, but heavy concentrations did occur in the east-central part. Areas which had from 71 to 100 per cent defoliation

were located in the northern part of Ocean County. Heavy defoliation by this pest totaled about 6,160 acres. Generally light defoliation (0 to 70 per cent), probably widespread in these areas, could not be mapped from the air.

(3) Birch Leaf Miner-Fenusa pusilla

This insect was observed defoliating about 490 acres of gray birch in the southwestern part of Sussex County. Scattered populations were also noticed throughout the gray birch range in the State but the damage was not nearly as severe.

(4) European Pine Sawfly-Neodiprion sertifer

Sawfly egg count surveys were again conducted this spring on red and Scotch pine plantings in northern New Jersey. Of the 44 plantations inspected, 10 had no infestation, 19 had trace infestations, 10 were lightly infested, three were light to moderate, and two were moderately infested. This is a slight increase in population levels as compared with last year's findings. In the areas where serious defoliation would have occurred, control, using the polyhedral virus material of the Division, was recommended.

Other Insect Pests

Insects found causing some minor defoliation of oaks were the fruit tree leaf roller, Archips argyrospila; green fruitworm, Lithophane antennata; linden looper, Erannis tiliaria; forest tent caterpillar, Malacosoma disstria; and the oak webworm, Archips fervidana.

Insects causing some minor damage to pine this spring include the pine twig gall scale, Matsucoccus gallicola; the red turpentine beetle, Dendroctonus valens; and a sawfly, Neodiprion pratti paradoxicus, on pitch pine; the European pine shoot moth, Rhyacionia buoliana; engraver beetles, Ips spp.; and the pine needle acale, Phenacaspis pinifoliae, on red pine; and the white pine aphid, Cinara strobi; introduced pine sawfly, Diprion similis; and white pine sawfly, Neodiprion pinetum, on white pine.

Forest Tree Diseases

Annosus root rot-Fomes annosus

This root fungus disease has been observed this season only in several scattered red pine plantings on the Newark Watershed properties in Passaic County. Several trees are killed each year as the fungus continues to spread slowly through the roots. At this time no control is warranted.

Shoestring root rot-Armillaria mellea

Infestations of this root disease have been found on several previously defoliated and weakened oak stands in the northern part of the State. Maintaining healthy trees would be the best means of controlling this fungus. Shoestring root rot is definitely associated with oak mortality and decline in New Jersey. A discussion of this problem follows.

Oak Mortality and Decline

Areas where mortality and serious decline have occurred are being closely watched. From 21 to 40 per cent mortality of oak stands has occurred on over 700 acres in Bergen County, 50 acres in Warren County, and on several acres in Salem County.

This mortality is attributed to insect defoliation, although drought and site are important contributing factors. A general decline is apparent, especially of the red oak group, in many areas of the State.

Indications are that unless there is a significant reduction in the injurious pest populations, namely the oak leaf roller, Croesia semipurpurana, and the fall cankerworm, Alsophila pometaria, through artificial or natural means; and a letup in the drought conditions experienced during the past several years, oak mortality and decline will become a more serious and widespread problem.

BUREAU OF PLANT PATHOLOGY

Cooperative Economic Plant Pest Surveys

These surveys are of three general types: (1) Detection surveys, which are designed to find pests new to the State or area; (2) overwintering population surveys, which are geared to probe potential initial threats prior to the growing season; and (3) current population surveys, which are aimed at determining initial appearances of and seasonal fluctuations in pest populations.

Detection Surveys

Detection Black Light Trapping

A total of five black light traps was used in an expanded program to detect insects previously unknown in the State. The traps were located in Hoboken, Newark, Trenton, Camden and McGuire Air Force Base and were operated as in previous years. Collected insects were sorted and prepared for identification by members of this Department, the College of Agriculture, or the United States Department of Agriculture. Additional insects were added from catches made in population survey traps. A sizable portion of all the catches has been identified and will form the basis of a reference collection.

Fruit Fly Detection Trapping

McPhail, Steiner and sticky board traps were again operated near ports of entry to detect possible introductions of fruit flies new to the area. The traps were located at 10 sites. A total of 282 sets of all captured flies with wing patterns was forwarded to the United States Department of Agriculture for final identification.

Although no new species were found, specimens of the genus Rhagoletotrypeta, which were taken for the first time in 1962, were again captured. From late July through late August, a total of 43 specimens of this genus was taken in Camden and three in Hoboken.

Cereal Leaf Beetle

A total of 333 locations distributed throughout the State was inspected in search of the cereal leaf beetle, Oulema melanopa. No signs were found of this very important grain pest which presently infests portions of three mid-western states.

White-Fringed Beetle

The 1963 summer survey was the third since eradication of white-fringed beetles, Graphognathus spp., from New Jersey was declared accomplished. The beetles had been found in New Jersey for the first time in 1954, when they were discovered damaging sweet potatoes in an area of about 35 acres near Vineland.

During the 1963 survey, southern and central areas of the State were scouted. Greater emphasis was placed (1) along route U. S. 206 south of Trenton, (2) in selected towns, and (3) in New Jersey Turnpike service areas. Again a search was made within the previous control area in Vineland. As in previous years, properties of diners, gas stations, truck terminals, auction markets, etc. were inspected. A total of more than 550 such establishments was examined for adult beetles or their feeding signs during July and August.

In addition, fall post-harvest checks for grub damage were made by Federal inspectors in Gloucester and Cumberland counties, and spring plowing inspections for grubs were made in the Vineland area. For the sixth consecutive year, no white-fringed beetles were found.

Khapra Beetle

Although this most serious of all stored grain pests, Trogoderma granarium, is not known to occur in New Jersey, 154 properties throughout the State were inspected for its presence. The survey was conducted from October 1963 through June 1964, and primarily included granaries and other grain-handling establishments. Results were negative.

Spotted Alfalfa Aphid

During the fall of 1963, aphids were collected from 99 alfalfa fields throughout the State to determine if the spotted alfalfa aphid, Therioaphis maculata, not hitherto known in New Jersey, was present. After preliminary screening, 46 samples of suspect aphids were submitted to the United States Department of Agriculture for identification. Results will be reported when they are received.

Sweet Potato Yellow Dwarf

Sweet potato crops in three situations of possible yellow dwarf infection were examined in August for the presence of the disease. Included in the survey were: (1) 12 farms on which the disease was found in 1962, (2) four plantings of the variety Centennial grown from newly imported stock, and (3) one Georgia Red planting originating from New Jersey stock previously designated by this Department as apparently free from yellow dwarf. In each instance results of inspection were negative.

Sweet Potato Weevil

During the fall harvest period, sweet potatoes on 14 of 16 southern New Jersey farms involved in control operations last year were examined for sweet potato weevil, Cylas formicarius elegantulus. Additional inspections for signs of this important sweet potato pest were made on 108 farms in conjunction with the fall survey for sweet potato russet crack disease. No weevils were found.

Witchweed

Witchweed, Striga asiatica, a serious parasitic weed on corn in North and South Carolina, has never been found in New Jersey. As part of the overall effort to detect new pests which might threaten the agriculture of the State, 33 corn fields in the central and southern sections were scouted for witchweed. None was found.

Imported Vegetable Plant Inspection

Vegetable plants imported into the State were inspected for (1) compliance with certification regulations, (2) freedom from dangerous diseases and insects, and (3) satisfactory plant quality. A total of 334 lots of plants was examined from April 27 to May 27, 1964. Five types of plants were inspected in the following quantities:

Plant Type	No. of Lots Inspected	No. of Containers in Shipments	No. of Containers Inspected
Tomato	271	73,061	1,163
Pepper	44	6,648	281
Cabbage	13	932	55
Eggplant	5	170	23
Onion	1	16	2
Totals	334	80,827	1,524

With the exception of five lots of tomato plants from Mississippi, all inpected plants were from Georgia, and all shipments were found to be properly certified. Except for two extremely light root-knot nematode infestations, the plants were apparently free from insect and disease problems. Plant quality, size and bundle count were generally adequate, although about 5 per cent of the plants were below standard size and about 15 per cent of the bundles were below standard count.

Overwintering Population Surveys

Asparagus Beetles

The overwintering abundance of common asparagus beetle, Crioceris asparagi, and spotted asparagus beetle, Crioceris duodecimpunctata, was determined in 56 asparagus fields in Atlantic, Burlington, Camden, Cumberland, Gloucester and Salem counties. Beetle populations were at the highest level since 1957 and considerably higher than last year, indicating a greater potential threat to the 1964 crop.

European Corn Borer

Populations of the European corn borer, Ostrinia nubilalis, entering and leaving overwintering stages were determined. A total of 105 fields in 12 counties throughout the State was inspected in the fall. The average statewide population was found to be lower than in any year since 1954. Below, for comparison, are yearly averages of numbers of borers per 100 plants since 1958.

1958 - 169.0	1961 - 158.4
1959 - 271.0	1962 - 110.8
1960 - 176.3	1963 - 79.4

Populations in 1963 were below those of the previous year in all counties except Burlington and Gloucester.

The overwinter mortality of borer larvae was checked in 11 counties during April. The 62.5 per cent mortality found this year was lower than in 1963 and comparable to the levels determined in 1962 and 1961. The factors causing death of overwintering larvae were as follows: bird feeding, 78.9 per cent; mechanical injury, 10.7 per cent; insect parasitization, 7.3 per cent; and fungi, 3.1 per cent.

On the basis of the surveys, the initial borer population potential for the 1964 season was low.

European Corn Borer Parasites

During the fall European corn borer survey, 900 corn borer larvae were collected for parasite studies. Parasite determinations made by the United States Department of Agriculture are presented in the following table:

EUROPEAN CORN BORER PARASITE RECOVERIES IN NEW JERSEY
LARVAE COLLECTED IN 1963

County[1]	Total Larvae Observed	Larvae Parasitized by: Horogenes punctorius No.	Horogenes punctorius Per Cent	Macrocentrus gifuensis No.	Macrocentrus gifuensis Per Cent
Sussex-A	45	...	...	2	4.4
Warren-B	49	...	...	8	16.3
Sussex-C	44	...	...	2	4.5
Warren-E	45	...	...	3	6.7
Somerset-F	39	...	...	3	7.7
Hunterdon-H	52	...	...	4	7.7
Somerset-I	44	...	...	...	...
Middlesex-J	50	2	4.0	...	...
Burlington-K	49	1	2.0	10	20.4
Ocean-L	53	...	...	1	1.9
Camden-M	53	...	...	1	1.9
Burlington-N	52	1	1.9	4	7.7
Salem-P	47	...	...	5	10.6
Gloucester-Q	50	...	...	4	8.0
Atlantic-R	27	...	...	2	7.4
Cumberland-S	51	...	...	1	2.0
Cape May-T	24	...	...	1	4.2
Cape May-U	50	...	...	...	...
Totals	824	4	0.5	51	6.2

The overall degree of parasitism this year was lower than the previous three years. Practically all the parasitism was due to Macrocentrus gifuensis. For the third successive year, Lydella grisescens was entirely absent.

Meadow Spittlebug

Fall and spring surveys were made to determine the abundance of the meadow spittlebug, Philaenus spumarius. Egg counts made in 67 alfalfa fields in 10 counties in the fall showed the potentially dangerous forage pest in relatively low numbers, but nymphal counts obtained in 32 fields in the spring showed a moderate population, slightly below the 1963 figure.

Potato Aphid

The overwintering abundance of the potato aphid, Macrosiphum euphorbiae, a pest injurious to several truck crops, was determined by examining swamp rose, its winter host, for its eggs. The survey was made between February 24 and March 10 at 24 locations in the southern and central parts of the State. Although the number of viable eggs found was slightly lower than in 1963, it was higher than in all but one of the previous six years of the survey.

[1]Letters following county names refer to quadrangles in the survey grid.

Current Population Surveys

Alfalfa Weevil and Pea Aphid

Alfalfa weevil, Hypera postica, and pea aphid, Macrosiphum pisi, populations were followed from May 6 to June 3 to aid in determining the urgency and timing of control measures. Weekly counts, made in 12 alfalfa fields in seven major alfalfa producing counties, indicated numbers of both insects were at relatively non-injurious levels.

Insect Population Black Light Trapping

Light traps were operated in Cumberland, Gloucester and Burlington counties to provide information on the seasonal abundance of the following important insect pests: Corn earworm, Heliothis zea; European corn borer, Ostrinia nubilalis; armyworm, Pseudaletia unipuncta; tobacco hornworm, Protoparce sexta; tomato hornworm, Protoparce quinquemaculata; and yellow striped armyworm, Prodenia ornithogalli. The information obtained was used to determine the need for and timing of control measures, and was forwarded to the College of Agriculture, Rutgers University, for distribution to growers through the Extension Service. Catches, small last year, have been somewhat larger thus far this year.

European Apple Sawfly

A survey made during June showed that the European apple sawfly, Hoplocampa testudinea, had spread 10 miles westward into Mercer County from areas of previously known infestation in the vicinity of Perrineville, Monmouth County. A total of 175 locations was scouted in Warren, Hunterdon, Somerset, Middlesex, Mercer, Monmouth, Ocean, Burlington, Camden, Gloucester and Salem counties in searching for this pest which first entered New Jersey in 1951 by way of its northeastern corner.

Plum Curculio

Weekly counts of plum curculios, Conotrachelus nenuphar, were made to aid in determining the proper timing of control measures against this pest. During April and May, populations were checked in two abandoned peach orchards in Gloucester County. Initial catches occurred on April 20 at Pitman with peak activity in mid-May, about the same as last year, but at somewhat lower population levels.

Cabbage Maggot and Onion Maggot

Survey techniques for cabbage maggot, Hylemya brassicae, and onion maggot, Hylemya antiqua, were developed during the spring and summer of 1963. Commencing April 16, 1964, white sticky board traps were operated in Cedarville and Great Meadows to determine the initial appearance and relative abundance of the pests.

Cabbage maggot adults were taken first on May 7 at both locations. Few of this species were taken in Cedarville thereafter. In Great Meadows as many as 57 cabbage maggot adults were taken on four traps on May 14.

The first onion adults were captured on April 28 in Cedarville and on May 14 in Great Meadows. The largest catches were made in Cedarville on May 21 and June 22. The largest catch in Great Meadows occurred May 28 and was approximately one-half as large as the May 21 catch in Cedarville.

Also caught were large numbers of adult seed corn maggot, Hylemya cilicrura, a species which has been reported to attack onions in like manner as onion maggot.

Oriental Fruit Moth

Preliminary trials in 1963 indicated systematic survey for oriental fruit moth, Grapholitha molesta, was feasible. The trapping procedures then developed were used in 1964 to determine the initial appearance and relative abundance of this important peach pest. Traps were placed in two abandoned peach orchards in Gloucester County. Adult moths were first caught on May 7 and peak populations were recorded on May 7 and June 15.

Apple Maggot

Investigations initiated in July 1963 indicated that determinations of first emergence and subsequent abundance of apple maggot, Rhagoletis pomonella, could be made by placing yellow sticky board traps in abandoned apple orchards. The traps were baited with a protein hydrolysate material.

Traps were placed in two orchards in Gloucester County and in one in Middlesex County during June 1964. Apple maggot adults were caught as early as June 18, and on June 25 large numbers were trapped.

Potato Leafhopper

Potato leafhopper, Empoasca fabae, populations were checked weekly during July and August to determine the need for and proper timing of control measures. Net sweeps made in 10 alfalfa fields in the central part of the State indicated population upsurges on July 19 and August 23. Suitable warnings were issued to growers to protect alfalfa, clover, potatoes and snap beans at these times.

Sweet Potato Russet Crack

Fall survey for this apparently new and destructive virus disease of sweet potatoes showed it to be present in various degrees in at least 26 sweet potato fields distributed among all five southern New Jersey counties surveyed. Altogether, 169 fields were scouted at harvest and the amount of russet crack was usually found to be less than 5 per cent. However, two Atlantic County farms had 30 per cent disease, and one in Gloucester County was found with 20 per cent diseased potatoes. Although the interior of the severely diseased root appeared little affected, the exterior was so russeted that it was unmarketable. Jersey types were found to be particularly affected.

Prior to 1964 bedding time, the Department prepared for distribution to county agents a list of growers and the number of bushels of sweet potatoes of certain varieties they had available in storage from fields inspected at harvest and found apparently free from russet crack.

Growers found during the previous fall to have diseased crops were visited and advised regarding the nature, dangers and control of the disease.

Spring surveys were made in a total of 14 sweet potato plant beds in four counties. Most plants were from stock previously found apparently free from russet crack, and results of the inspections were negative.

Shade and Forest Tree Pest Surveys

Dutch Elm Disease (Calendar Year 1963)

Functions of the Department related to the control of Dutch elm disease, (caused by the fungus Ceratocystis ulmi), continued along three lines: (1) Supervision of disposition of elm wood encountered by State highway contracts, (2) provision, upon request, of scouting and related diagnostic services, and (3) issuance of control recommendations. Responsibility for physical operations of control is left to local governments and private owners. Scouting results were as follows:

DUTCH ELM DISEASE SCOUTING, 1963

County and Property	No. of Elms Examined	No. of Elms Diseased
Camden County		
County institutions at Lakeland	116	10
Essex County		
County parks	1,375	3[1]
Hudson County		
County parks	2,500	6[1]
Jersey City	2,000	0
Middlesex County		
Perth Amboy	350	1
Union County		
County parks	250	4
Baltusrol Country Club	250	0
Totals	6,841	24[1]

In addition, 51 elm trees on small properties were inspected, upon request, and 30 were found to be affected by the disease.

Where the program recommended by the Department was followed, good Dutch elm disease control resulted. Otherwise, symptoms of Dutch elm disease were unusually prevalent and, presumably because of the extreme drought conditions, appeared to affect young trees in uncommonly high proportion.

Inspection for encountered elm wood was provided State highway construction in the vicinity of Dover.

In the spring of 1964, approximately 500 copies of 1964 Recommendations for Dutch Elm Disease Control in New Jersey were distributed to State institutions, county agents, shade tree commissions, certified tree experts

[1]Any trees previously removed as diseased by county personnel not included.

and others concerned with the control of the Dutch elm disease.

London Plane Canker Stain Disease (Calendar Year 1963)

Manpower requirements of higher priority necessitated restriction of the year's scouting for this disease to (1) northern New Jersey areas of most recent disease activity and (2) municipalities specifically requesting scouting services during the season.

Caused by the fungus, Ceratocystis finbriata f. platani, the canker stain disease of London plane trees is easily transmitted from diseased to healthy trees by any cutting or bruising, such as by jackknife or lawn mower. Prompt removal of diseased trees is an essential control measure.

Details of the 1963 scouting are given in the following table:

CANKER STAIN DISEASE SCOUTING, 1963

County and Property	Total Scouted	Number of Trees Diseased Newly Located
Camden		
Hi Nella	1,000	4
Mercer		
Ewing Township	176	1
Warren		
Phillipsburg	740	0
Pohatcong Township	500	4
Totals	2,416	9

Incidence of the disease in areas scouted was about the same as during the past year or two.

Oak Wilt

Survey to detect a possible first occurrence of oak wilt in New Jersey was conducted for the 14th year with negative results. The deadly oak disease, caused by the fungus Ceratocystis fagacearum was active in Pennsylvania, just across the Susquehanna River, approximately 115 miles west of New Jersey. It was also active, at about the same distance, in Maryland. Scouting in 1963 was conducted during July, August and September, using ground survey methods. The major oak-containing wooded areas of the State, distributed among 11 counties, were covered. First attention was given to the northwestern section of the State where the most valuable oak stands are located.

Oak Leaf Roller Defoliation

Identifications received from the United States Department of Agriculture indicated that the moderate to severe defoliation of red and black oaks found in certain relatively small areas of the State in May and June 1963 was mainly attributable to the oak leaf roller, Croesia semipurpurana. The insect and/or its damage had been found in the counties of Morris, Somerset, Warren, Hunterdon, Burlington and Salem. The greatest amount of defoliation (up to 90 per cent) was seen in sections of lower Morris County on red and pin oak.

Other much less commonly observed leaf rollers taken from oak in May or June 1963 were identified by the United States Department of Agriculture as follows: From Somerset County, Archips semiferana (Walker), and Archips argyrospila (Walker), the fruit-tree leaf roller; from Hunterdon County, Archips semiferana (Walker); and from Salem County, "Telphusa" latifasciella (Chambers).

With the exception of severe defoliation in isolated areas of eastern Salem County, which was attributed in part to heavy forest tent caterpillar, Malacosoma disstria, infestation, defoliation due to foliage feeders other than leaf rollers was considered to be minor.

Other Shade and Forest Tree Pests

The wooded areas of Picatinny Arsenal were inspected, on request, for evidence of the fall webworm, Hyphantria cunea, and other hardwood defoliators. Results were negative.

A request inspection of the trees on the grounds of the Ancora State Hospital showed them to be in generally good condition and responding to fertilization and irrigation.

Special request inspections of shade tree problems in the State other than Dutch elm disease indicated the following to be the more conspicuous pests or unfavorable conditions confronting private property owners:

Pest or Condition	Type Tree	County
Gouty oak gall Phagiotrochus punctatus	Red oak	Passaic
Canker stain disease Ceratocystis fimbriata f. platani	London plane	Mercer
Slime flux	Norway maple	Mercer and Passaic
Drought (Leaf scorch)	Maple	Mercer and Camden

Altogether, 23 special inspections were made.

Plant Pathological Diagnostic Services

A total of 30 determinations was made, including the following representative diagnoses:

Diagnosis	Host	County	Month
Chestnut blight Endothia parasitica	Chinese chestnut hybrid	Ocean	August
Leaf scorch (Non-parasitic)	Norway maple	Salem	August
	Sugar Maple	Camden	September
	White pine	Hunterdon	May
Root and butt rot Fomes annosus (fungus)	Red pine	Passaic	September

Diagnosis	Host	County	Month
Bacterial spot *Xanthomonas vesicatoria*	Pepper	Cumberland	September
Canker stain *Ceratocystis fimbriata f. platani* (fungus)	London plane	Mercer and Warren	October and May
Cold injury (Non-parasitic)	Rhododendron	Middlesex	March
Sand blast injury (Non-parasitic)	Pepper	(Southern plants)	May
Early blight collar rot *Alternaria solani* (fungus)	Tomato	(Southern plants)	May
Dutch elm disease *Ceratocystis ulmi* (fungus)	Elm	Bergen and Mercer	June

BUREAU OF SEED CERTIFICATION

Grain Seed Certification

Seeds are farmers' promises of the future. The future crop cannot be any better than the genetic composition within the seed. Beginning with good seed, a good farmer with his skills and expert knowledge has a fine potential for future yields. However, with poor seed his skills and knowledge are cancelled out. Certification programs are designed to assure the farmer he can obtain seed that will not curtail his future returns.

Barley

The acreage entered for certification dropped sharply; 434 acres were entered compared with 524 the previous year. The severe cold winter with little snow cover caused many fields to deteriorate to an extent that they could not be used for seed. Rejections were high with 135 acres, or 31 per cent, not meeting the requirements for seed.

The registered seed that had been hot water treated for the control of loose smut was weakened by this process and did not survive the winter. The New Jersey Crop Improvement Association compensated the growers of foundation seed in order to save enough planting stock to perpetuate the program.

As was expected, yields were very low with the Wong variety averaging 39 bushels per acre and Early Wong averaging 16 bushels per acre. In most years, a yield of 55 bushels of cleaned seed per acre is considered normal.

A total of 8,924 bushels met the requirements for certification compared with 29,942 bushels last year.

The following is a summary of the 1963 barley program:

Variety	Acres Entered	Acres Rejected	Acres Passed	Bushels Sealed
Wong				
Foundation	5	...	5	189
Registered	39	...	39	1,572
Certified	215	80	135	5,214
Early Wong				
Foundation	5	...	5	47
Registered	20	10	10	144
Certified	150	45	105	1,758
Totals	434	135	299	8,924

The acreage of barley entered for certification has been steadily decreasing since 1960. This is unfortunate, since the supply is considerably less than the demand. A concerted effort will be made by all those connected with the barley program to enlighten good farmers about the advantages of growing seed.

Field Corn

For the second consecutive year dry weather caused erratic performance of the seed corn fields. Two growers who used irrigation were able to produce record yields of 61 and 65 bushels of flat grades per acre. Other growers who did not irrigate their fields had yields as low as 15 bushels of flat grades per acre.

Several producers had blackbird problems which caused a reduction in yield and seed quality.

A total of 541.5 acres was entered for certification, an increase of 168.5 acres over the previous year.

The following is a summary of the acres entered for certification in 1963:

Hybrid	Acres Entered	Acres Rejected	Acres Passed
New Jersey No. 8	84	30	54
New Jersey No. 9	395	5	390
New Jersey No. 10	30	...	30
New Jersey No. 11	10	...	10
Connecticut No. 554	22.5	...	22.5
Totals	541.5	35	506.5

Increased acreage, along with less rejections, resulted in a total of 22,118 bushels of field corn seed sealed as certified. This is an increase of 2,000 bushels over last year and the second highest production achieved in the New Jersey program. There is a good demand for New Jersey certified seed corn, and this high production should be maintained.

The following is a summary of the field corn sealed in 1963:

Hybrid	Bushels Sealed New Crop	Carry-over	Total
New Jersey No. 8	2,132	546	2,678
New Jersey No. 9	15,827	955	16,782
New Jersey No. 10	716	873	1,589
New Jersey No. 11	196	...	196
Connecticut No. 554	616	257	873
Totals	19,487	2,631	22,118

The New Jersey Crop Improvement Association endeavors continually to improve its processing facilities. This year a new husking bed and corn sheller were installed. Also, new flooring was placed in the drying bins. The processing plant at Allentown is now equipped to produce seed of the highest quality.

The acreage of corn has remained fairly stable in the past few years, which indicates that New Jersey hybrids are holding their own, despite the competition. The trend in corn seed production is for less farmers to produce more seed.

Sweet Corn

The development of a certification program has helped to improve seed quality from all sources supplying New Jersey farmers with seed. Good grading standards and adequate chemical protective treatments are now accepted standards of all seed distributed in the State. Sufficient carry-over of N. J. 209-A, N. J. XP 222 and N. J. XP 317 seed was available.

New Jersey No. 106, an early maturing variety that is well accepted in Pennsylvania and New Jersey, was planned for seed production. However, one three-acre field was improperly planted and had to be rejected.

Oats

Norline oats, which until this year had exhibited considerable winter hardiness, have been in demand by New Jersey farmers. The severe winter of 1962-63 took its toll of winter oats. Only two seed fields survived the cold winds and even these were only portions of fields which were protected by natural windbreaks.

The following is the final summary of the 1963 oat program:

Variety	Acres Entered	Acres Rejected	Acres Passed	Bushels Sealed
Norline	13	...	13	616
Beedee	25	...	25	1,464
Totals	38	...	38	2,080

Under the conditions, it will take several years of good crop production to erase the memory of this crop failure.

While winter oats did very poorly, spring oats produced a good crop. Only one field was entered for certification but the resulting crop was of excellent quality. The quantity of New Jersey certified spring oats available was double that of the previous year.

Soybeans

Soybean seed yields were reduced because of dry weather, but the quality of seed was excellent. A total of 258.5 acres was entered for certification, compared with 700 acres the previous year. There were very few rejections, so that the total acreage passing certification requirements was more than last year.

Yields averaged 15 bushels of clean seed per acre and a total of 2,534.5 bushels was sealed.

The future of soybean production in New Jersey has been brightened by the release of a new variety called Adelphia. Dr. John Anderson of the College of Agriculture, Rutgers University, is responsible for this release which is the first to come from New Jersey. Fifty-seven bushels of foundation seed were given to the New Jersey Crop Improvement Association for increase. This improved soybean is expected to replace the popular Clark variety, which is highly susceptible to Diaporthe disease.

The following is a summary of the 1963 soybean program:

Variety	Acres Entered	Acres Rejected	Acres Passed	Bushels Sealed
Adelphia	2.5	...	2.5	57
Clark	210	...	210	2,080
Hawkeye	46	18	28	397.5
Totals	258.5	18	240.5	2,534.5

The acreage of soybeans being entered for certification is disappointing. In 1957 and 1958, over 1,000 acres were entered. This has dropped off steadily. Several factors might account for this trend. There has been a steady increase in the price of oil, and keen competition causing a price squeeze could be responsible. However, the high incidence of Diaporthe disease might well be the main factor.

Wheat

For the second consecutive year, moisture available for the growth of small grains has been less than normal. It appears that wheat is much more tolerant of these conditions than other crops, since the average yields have not been adversely affected.

A total of 939 acres was entered for certification, an increase of 140 acres over last year. Of this, 228 acres, or about 23 per cent, had to be rejected, usually due to mixtures of other varieties. The source of this rejected seed was traced to one farmer who had produced two different varieties on his farm last year.

Although most of the season was dry, much of the wheat crop was harvested with moisture too high for safe storage. These lots had to be artificially dried.

A total of 21,726 bushels was sealed as certified which is the most wheat sealed in recent years. It appears that the demand for certified wheat seed will again be greater than the supply, Therefore, farmers will be encouraged to increase their 1964 plantings.

The following is a summary of the 1963 winter wheat program:

Variety	Acres Entered	Acres Rejected	Acres Passed	Bushels Sealed
Redcoat				
Foundation	5	...	5	139.5
Registered	120	...	120	3,556.5
Certified	461	164	297	9,060.5
Pennoll				
Foundation	3	...	3	90
Registered	23	...	23	576
Certified	327	64	263	8,304
Totals	939	228	711	21,726.5

Summary

The following is a summary of the cereal acreage entered for certification in recent years:

Year	Total Acres Entered	Barley	Wheat	Oats	Corn	Soybean
1963	2,210	434	939	38	541	258
1962	2,668	524	799	270	375	700
1961	2,588	656	616	175	547	594
1960	3,031	870	986	48	546	581
1959	2,429	475	862	13	437	642
1958	2,771	625	773	46	313	1,014
1957	2,628	429	646	76	295	1,182

A summary of the certified seed grain sealing from 1956 to 1963 follows:

Year	Total Sealed (bushels)	Corn (bushels)	Oats (bushels)	Wheat (bushels)	Barley (bushels)	Soybeans (bushels)	Sweet Corn (bushels)
1963	57,382	22,118	2,080	21,726	8,924	2,534	...
1962	81,121	20,374	9,842	15,680	29,942	5,242	41
1961	65,924	21,412	7,332	10,980	24,764	1,402	34
1960	59,685	15,063	2,980	11,069	28,411	2,067	95
1959	56,373	14,921	257	16,309	19,969	4,330	587
1958	66,251	14,654	1,275	16,583	22,659	10,854	226
1957	67,518	15,005	2,568	16,803	23,171	9,421	550
1956	84,281	28,972	3,456	14,356	19,478	18,019	...

Seed Potato Certification

White Potatoes

Only two acres, the smallest in the history of the program, were entered for certification. The interest in producing late crop seed potatoes is disappearing and it is expected that within a year or two there will be no certified white potato seed produced in New Jersey. High quality seed from other northern producing areas is available at fair prices.

The acreage inspected was found to meet the regulation standards for varietal purity and disease content. Insects were controlled with periodic spraying and practically no virus diseases were observed. No bacterial ring rot was noted.

Sweet Potatoes

The sweet potato certification program was suspended because a new and serious disease, russet crack, has been found in the breeding stock. New strains of Jersey Orange or Yellow Jersey varieties can not be developed until more is known of the disease.

The five seed lines that were selected over an extended period as having good quality and high yielding ability are being maintained and attempts will be made to remove the disease.

Tomato Seed Certification

On the basis of field inspections, 805.5 acres of tomatoes were approved as having met the varietal purity and disease content standards for certification. An additional 221 acres were approved for disease content standards only. Dry growing conditions lowered quantity and quality of the tomato crop, so that seed was saved from only a very small portion of the acreage inspected. Fair blossom set occurred, but the fruit made very little size, thus reducing the tonnage per acre.

Campbell's No. 146 again led in inspected acreage with 36 per cent of the total (373 acres). The next highest acreage inspected was of Campbell's No. 135..

Very little disease was noted in the seed fields and in the laboratory, perhaps because of the dry growing season. The primary reason for rejection was varietal mixture.

The following is a summary of the tomato acreage inspected for seed:

TOMATO SEED ACREAGE - 1963

Seedsman	Rutgers	Roma	Valiant	No.135	No.146	No.1327	No.721	Total
Campbell Soup Co.	...	...	...	223	273	18	32	546
Ritter Seed Co.	20.5	...	...	...	5	...	...	25.5
Francis C. Stokes Co.	...	63	3	...	71	...	...	137
Swedesboro Seed Co.	67	6	...	...	24	...	...	97
Totals	87.5	69	3	223	373	18	32	805.5

PHYTOSANITARY INSPECTION

Seedsman	Homestead	No.1350	No.1370	Stokescross No.5	Total
Ritter Seed Co.	...	21	...	...	21
Francis C. Stokes Co.	...	51	35	6	92
Swedesboro Seed Co.	25	83	...	...	108
Totals	25	155	35	6	221

Breeder seed of three Heinz varieties, No. 1370, No. 1350 and No. 1409 has been provided by the Research Department of the Heinz Company for seed increase. Swedesboro Seed Company will make the increase and certification for these varieties will be based on that material. Heinz No. 1350 is a good producer in New Jersey and has many qualities sought by the processors. It is also becoming a very popular fresh market and green wrap tomato.

A total of 15,942 pounds of seed met the certification requirements. All seed was sampled by inspectors and tested for adequate chemical treatment. Several lots gave indication of improper chemical application and retreatment was required. Seed appearance was acceptable, bright color but slightly smaller than usual. Germination percentages were satisfactory.

New Jersey certified tomato seed received worldwide distribution.

POUNDS OF TOMATO SEED CERTIFIED IN 1963

Seedsman	Rutgers	Roma	Valiant	No.135	No.146	No.1327	No.721	Total
Campbell Soup Co.	...	...	...	3,725	2,700	1,250	445	8,120
Ritter Seed Co.	871	...	...	...	196	...	...	1,067
Francis C. Stokes Co.	...	350	110	...	650	...	...	1,110
Swedesboro Seed Co.	3,085	580	...	...	1,980	...	...	5,645
Totals	3,956	930	110	3,725	5,526	1,250	445	15,942

PHYTOSANITARY INSPECTION

Seedsman	Homestead	No.1350	No.1370	Stokescross No.5,F-2	Total
Ritter Seed Co.	...	658	...	...	658
Francis C. Stokes Co.	...	1,400	800	480	2,680
Swedesboro Seed Co.	908	4,780	...	...	5,688
Totals	908	6,838	800	480	9,026

POUNDS OF NEW JERSEY VEGETABLE SEED EXPORTED FOR WHICH PHYTOSANITARY CERTIFICATES WERE ISSUED

1963	Ceylon	Mauritius	Italy	France	Union of South Africa	Republic Dominicana	Nigeria	Total
July	...	...	...	...	50	...	...	50
September	...	10	...	...	...	...	...	10
October	10	1	...	...	...	...	...	11
November	...	3	...	...	40	...	...	43
1964								
January	...	...		732	...	...	...	732
February	...	4	1-6 oz.	...	...	...	1 oz.	5-7 oz.
March	...	3	...	...	...	60	...	63
June	...	...	...	...	70	...	...	70
Totals	10	21	1-6 oz.	732	160	60	1 oz.	984-7 oz.

POUNDS OF NEW JERSEY CERTIFIED TOMATO SEED VALIDATED FOR EXPORT SHIPMENT

1963	Canada	England	Mexico	Kenya East Africa	Portugese East Africa	Union of South Africa	Total
July	...	...	...	...	...	150	150
August	...	...	...	10	...	...	10
October	...	...	100	...	...	...	100
November	...	4 oz.	...	...	...	10	10-4 oz.
December	...	...	...	...	...	60	60
1964							
January	...	...	...	...	20	...	20
February	15	1	...	...	...	70	86
April	...	...	...	...	...	10	10
June	...	...	...	...	...	145	145
Totals	15	1-4 oz.	100	10	20	445	591-4 oz.

Asparagus

The asparagus seed block established in 1963 jointly with the College of Agriculture, Rutgers University, and the New Jersey Asparagus Industry Council was maintained in satisfactory manner for seed production. The first seed

that was harvested, however small in poundage, proved the plan could be successful. Only a very small percentage of plants were lost in the seed block because of growing conditions, despite a very dry season.

Seed was harvested on a weekly basis and picked by hand instead of clipping the entire plant. This preserved the plant and maintained the established root system. Though a costly harvest, 20 pounds of seed were extracted and distributed by the Asparagus Council.

The entire acreage was inspected for rust resistance and it was found no correlation could be made between plants of the same stock. No additional effort will be made to discard parent stock on the rust observation.

Surprisingly little information is available on seed storage for asparagus seed. With the aid of Dr. Lela V. Barton of the Boyce-Thompson Institute, New York City, the following procedure has been set for the 1964 seed harvest:

1. Freshly harvested mature seed to be extracted from the berry, washed and air dried.

2. Seed to be artificially dried to 10 per cent with heated forced air of not over 90 degrees F.

3. Seed to be cleaned, treated and packaged in airtight metal cans of one and five-pound capacity.

4. Canned seed to be refrigerated at 35 degrees F.

5. Label to be glued to can for identification, seed analysis and other information necessary for distribution.

This seed, although greatly improved over that presently available, will not qualify genetically to be certified. However, it will be labeled as "State Approved."

Pepper Seed

This relatively new program was designed to make available pepper seed that had been grown and processed under regulations designed to insure maximum freedom from disease producing organisms. Seed produced under the regulations appears to be completely free of harmful diseases.

A total of 89 acres was entered for disease inspection. The acreage includes four varieties used mainly for processing. The seed acreage was inspected weekly for diseases, particularly bacterial leaf spot, during the harvest season. One 35-acre field revealed a slight infection of leaf spot and was rejected. A heavy frost on September 25 completed the pepper production for the year.

Inspections were made during the chemical treatment of pepper seed for the control of bacterial leaf spot. Seed samples were extracted after treatment and plated in the laboratory for the presence of bacterial colonies. Seed, free of contaminants, was obtained from all lots.

Summary of the pepper phytosanitary program:

Variety	Acres Passed	Pounds Approved
Early Calwonder	20	...
California Wonder	18	750
Keystone Resistant Giant	12	300
Yolo Wonder	39	900
Totals	89	1,950

Cultivated Sod

Producers of cultivated sod organized an association to promote the interests of sod producers and to sponsor a certification program. Twelve firms approved a constitution and by-laws for the association and provided an associate membership for a large group of people who furnish services to sod growers. New Jersey is the first state to attempt to produce sod with a certification program whereby varietal purity, weed content and other quality factors can be assured to the purchaser.

Applications for sod production were received from eight growers with a total of 362 acres. The fields were inspected in early spring and mapped for future reference. Inspections continued throughout the growing season for particular problems that become apparent only at certain times of the year. It is anticipated that only a small amount of the present acreage will qualify for certification.

All seed lots used for sod production are investigated for impurities and other crop mixtures. The certification agencies in the western seed production areas are extremely helpful in supplying information.

Greater quantities of sod have been shipped from New Jersey this year than in any previous. Many sod producers have completely sold out their next year's supply. With such a great demand for sod, quality factors promoted by a certification program become secondary in the movement of the product.

Virus-free Strawberry Plants

This was the sixth year of the production of these superior strawberry plants. The demand for this planting stock was greater than production. Good quality plants were difficult to purchase throughout the Mid-Atlantic states. This is the last year for the production of the Midland variety. It will be replaced with Midway.

A total of 944,000 plants was certified for sale as follows:

Jerseybelle	650,000	
Vesper	110,000	
Sparkle	44,000	
Midland	28,000	
Miscellaneous seedlings	4,000	836,000
Bulk sales in dirt		108,000
Total		944,000

Raspberry

The Small Fruits Council, in cooperation with Rutgers University and the Department, is attempting to reactivate the raspberry industry of the State. Three new varieties developed by Dr. I. C. Haut of the University of Maryland have been released to New Jersey. The Council has authorized the purchase of 30,000 plants: 10,000 each of Suntay 1, Miltsun and 59-A. The new varieties will be observed for performance and the possibility of a certified plant program.

BUREAU OF PLANT LABORATORY

Bee Disease Examination

Microscopic examination was made of 25 samples of suspected bee disease material submitted by the inspectors of bee culture or by individual beekeepers. Of the total number of specimens examined, seven were negative for disease, five positive for American foulbrood, and 13 positive for European foulbrood. Examination results were submitted to the supervisor of bee culture for appropriate action.

Certified Seed Testing

Nine samples of officially certified pepper seed and 36 samples of tomato seed were tested to determine adequacy of chemical treatment. All samples were found to be satisfactorily treated.

Strawberry Plant Examination for Nematodes

Strawberry plants grown under the virus-free certification program were sampled for plant parasitic nematodes. In accordance with certification requirements, plants are to be treated with a nematocide. The plantings were found to be adequately treated and no nematode problems were encountered.

Soybean Cyst Nematode Survey

Soybean cyst nematodes, Heterodera glycines, can be extremely damaging to the production of soybeans, an important crop in New Jersey. Farmers in many areas of the southern United States are now finding is impossible to grow soybeans profitably because of this pest.

For the eighth year, a systematic survey of soybean fields conducted by inspectors of the Bureau of Seed Certification failed to show the presence of the nematode. Soil samples were collected from all fields having visual symptoms of nematodes, as well as from fields having a long history of soybean production. Of the 196 samples processed, 45 contained cysts, all of which were identified as either Heterodera weissi, the smartweed cyst nematode, or Heterodera trifolii, the clover cyst nematode. Neither of these nematodes is of agricultural significance in this State.

The sample inspected in this survey, 10,582 acres, represents about 20 per cent of the soybean acreage of the State.

Request Sampling for Plant Parasitic Nematodes

During the year, 21 nurserymen requested sampling of plantings for plant parasitic nematodes. Nematode problems were recognized in 13 nurseries, disease problems in three, and nutritional problems in five. Control measures were recommended in all cases.

Sawflies in Native Pine

For the past five years populations of the sawflies Neodiprion pinirigidae, Neodiprion lecontei, and Neodiprion pratti paradoxicus, have been low. A complex of biological control agents is apparently responsible for control. Dahlbominus fuscipennis, a cocoon parasite released by this laboratory in past years, continues to maintain a high population and is the predominant parasite.

Imported Cabbage Worm-Pieris rapae

During late summer, larvae were collected and reared for the purpose of recovering insect parasites and microbial control agents associated with the cabbage worm. Rearing revealed that 20 per cent of the larvae were parasitized by a tiny wasp, Apanteles glomeratus, and 1 per cent by a tachinid fly, Compsilura concinnata. Both recovered insects are known, released parasites. No other insect or microbial agent was recovered.

European Pine Shoot Moth-Rhyacionia buoliana

Early instar larvae were collected and reared during late winter for the purpose of virus propagation. The virus being employed was recovered by this laboratory in 1962, at Washington Crossing. Due to rearing problems, a field collection of diseased larvae had to be made this spring. Rearing of shoot moth larvae is planned for the winter of 1965 in an effort to provide an adequate bank of virus material to permit a field trial.

European Corn Borer-Ostrinia nubilalis

Overwintering corn borer larvae were collected to determine the insect parasites and microbial control agents associated with this pest. Two parasites were recovered, Macrocentrus gifuensis, a braconid, and Horogenes punctorius, an ichneumonid, both released in 1944. An unidentified entomogenous bacterium was also recovered from diseased larvae. The organism has been sent to the Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland, for identification.

Cabbage Looper-*Trichoplusia ni*

During late fall, cabbage looper larvae were collected, virus sprayed and reared for the purpose of establishing a bank of cabbage looper virus. Field tests conducted by the Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland, have shown the virus to be 90 per cent effective in controlling the cabbage looper. Cabbage looper has been most difficult to control chemically because of its insecticidal tolerance. It is planned to make the virus available to crucifer growers, should field trial prove successful this summer.

European Pine Sawfly Virus Programs

For the past four years *Neodiprion sertifer* virus has been made available to red pine plantation owners for control of the European pine sawfly. Upon request, 35 acres of the Washington Crossing State Park, 15 acres of the Hackensack Water Company, and three acres of the East Orange Water Company red pine plantations were virus sprayed.

In addition, four sawfly infested red pine plantings in Hunterdon County were sprayed for virus recovery. A sufficient supply of virus material was collected and banked to meet any needs next year.

Eastern Tent Caterpillar-*Malacosoma americanum*

Virus diseased caterpillars were collected and reared for the purpose of establishing an eastern tent caterpillar virus bank. This work was performed as part of a continuing effort to provide for banks of viruses which attack various insect pests.

Nursery Nematode Survey

Soil and root samples were collected to determine the species of plant parasitic nematodes associated with the *Ericaceous* plants, rhododendron, azalea, andromeda and mountain laurel.

A total of 330 samples was collected, processed and examined. The entire sampling represents 117 species of *Ericaceous* plants from which 37 species of plant parasitic nematodes were recovered. The following is a list of the nematode species recovered:

Nematode	Times Recovered
Criconemoides curvatum	61
Criconemoides lobatum	2
Criconemoides macrodorum	1
Criconemoides xenoplax	8
Criconemoides spp.	2
Gracilacus aciculus	1
Gracilacus audriellus	2
Gracilacus intermedius	1
Gracilacus mirus	1

Nematode	Times Recovered
Helicotylenchus dihystera	8
Helicotylenchus erythrinae group	6
Helicotylenchus microlobus	1
Helicotylenchus platyurus	16
Helicotylenchus spp.	16
Hemicriconemoides chitwoodi	2
Hemicycliophora spp.	3
Hoplolaimus galeatus	94
Hoplolaimus sp.	1
Longidorus elongatus	3
Longidorus sp.	1
Meloidogyne spp.	2
Paratylenchus hamatus	2
Paratylenchus microdorus	1
Paratylenchus projectus	139
Paratylenchus spp.	24
Pratylenchus convallariae	1
Pratylenchus crenatus	119
Pratylenchus hexincisus	1
Pratylenchus neglectus	1
Pratylenchus penetrans	31
Pratylenchus scribneri	2
Pratylenchus spp.	22
Rotylenchus uniformis	35
Rotylenchus spp.	6
Scutellonema brachyurum	3
Trichodorus aequalis	5
Trichodorus christiei	35
Trichodorus obscurus	2
Trichodorus spp.	8
Tylenchorhynchus claytoni	98
Tylenchorhynchus dubius	2
Tylenchorhynchus maximus	5
Tylenchorhynchus parvus	2
Tylenchorhynchus spp.	7
Xiphinema americanum	21
Xiphinema chambersi	1

Gypsy Moth Parasite Program

During the fall, 784,500 Ooencyrtus kuwanae, a hymenopterous egg parasite of the gypsy moth, were received from the Plant Pest Control Laboratory, United States Department of Agriculture, Naugatuck, Connecticut. The parasites were released at all 154 positive trap sites in the following counties: Bergen County, 5,000; Morris County, 105,000; Passaic County, 55,000; Somerset County, 193,500; Sussex County, 411,000; and Warren County, 15,000. Also received this spring from the Plant Pest Control Laboratory and released at sites in Somerset County were 150 Compsilura concinnata, a tachinid larval parasite; 200 Sturmia scutellata, a tachinid larval parasite; and 350 Calosoma sycophanta, beetle larvae predaceous on gypsy moth larvae and pupae.

Received this spring from Spain and imported through United States Department of Agriculture, Parasite Introduction Branch, Moorestown, were 5,780 Tricholyga segregata, a tachinid larval parasite; 4,955 Brachymeria intermedia, a hymenopterous pupal parasite; and 36 Apanteles vitripennis, a hymenopterous larval parasite. All three parasites were released at various sites in Somerset County and are parasites that have not been established in the United States.

Additional parasites are to be released this fall in a continuing effort to release every known gypsy moth parasite in the State.

Alfalfa Weevil Parasite Program

For the past three years, this laboratory, in cooperation with the Agricultural Research Service, United States Department of Agriculture, has undertaken the rearing and releasing of alfalfa weevil parasites. During the past year, this laboratory reared and released Bathyplectes curculionis and Tetrastichus incertus, both larval parasites of the alfalfa weevil. Releases during the calendar year were as follows:

County	Bathyplectes	Tetrastichus
Burlington	544	1,736
Camden	14,388	412
Gloucester	9,662	3,390
Hunterdon	15,404	1,137
Mercer	3,020	4,242
Middlesex	9,744	327
Monmouth	1,932	1,031
Morris	300	500
Salem	17,927	7,094
Somerset		300
Sussex	7,032	1,266
Warren	3,372	711

Tetrastichus is now established in all of the alfalfa growing counties of the State, and Bathyplectes is established in all but two counties. Results thus far indicate that the parasites are making a substantial reduction in the weevil population in areas where releases were made in 1960-1961.

OFFICE OF MILK INDUSTRY

Floyd R. Hoffman, Director

ADMINISTRATION

Changes taking place in the processing and distribution of milk and resulting adjustment problems in the industry made it necessary to amend many State and Federal milk controls during the year.

A gradual change during the past few years in the method of distributing milk to consumers created intense price competition, causing hardship for many milk companies. Until recent years, home delivery of milk was the principal method of distribution in New Jersey. Now, home delivery sales are declining while sales of milk through retail food stores are increasing. This is largely due to the price advantages offered by the supermarkets and the specialized dairy stores. Such stores, many of which are organized in chains, usually specialize in half-gallon and gallon bottles. Although this type of "jug" store was practically non-existent in New Jersey prior to 1962, licenses were issued to 154 chain dairy stores operated by seven companies during fiscal 1963-1964. These stores have promoted sales of larger size containers, offering them at reduced cash-and-carry prices.

Some companies operating the chains have contested the legality of milk control and price-fixing orders. To some extent, this has been a disruptive force in the industry. It has brought about the need to purchase the raw product from out-of-state sources at a lesser price, thus affecting the market for New Jersey producers. Many smaller dealers and subdealers who could not compete have gone out of business and many others are threatened with the loss of business.

These changes in marketing conditions and competitive practices, and concern for the public interest brought about need for a careful study of the problems developing in the State that affected all levels of the industry as well as consumers. To accomplish a program that would be beneficial to all concerned, additional cost studies were made, public hearings were conducted and many conferences were held. As a result, several major steps were taken. These included the issuance of additional emergency regulations, a new type of minimum price-fixing order, and the inclusion of the southern section of the State in a Federal milk marketing order.

Emergency Measures Adopted

As a means of securing continuity in the developments and measures adopted during the year 1963-64, it is necessary to review briefly the action taken during the previous year. After a long series of legal procedures regarding price-fixing orders, appeals and rebate systems, Governor Richard J. Hughes appointed a five-member Milk Price Study Committee in July 1962. Upon the Governor's advice, which was based on the Committee's recommendation, all fixed milk and cream prices above the producer level were rescinded on October 19, 1962. To avert price wars and unfair competition, two regulations were issued,

H-11 and H-12. The first prohibited sales below cost. The second required an advance posting of prices to be charged for milk and milk products.

During the six weeks following the suspension of milk prices, many New Jersey dairy farmers were notified that their milk would no longer be received, as dealers were seeking cheaper out-of-state supplies. While consumers benefited temporarily, the lack of a pricing system could become harmful in the long run. Because of severe price competition, distributors would be forced to curtail expenditures, and thus the quality and service to consumers could be reduced. Also, the lack of a pricing system could result in losses to many dealers, driving them out of business, which would promote a trend toward monopoly.

Following conferences with representatives of producer and distributor groups in the industry, officials of government agencies and other knowledgeable persons, Chapters 181 and 182, P.L. 1962, were enacted. Chapter 181 doubled the license fees to be paid by all licensees of the Office of Milk Industry to provide revenue to employ professional and technical assistance to make a cost study and to establish and enforce a uniform system of accounting and reporting in the milk industry. Chapter 182, known as the Emergency Milk Control Law, authorized the director to suspend the issuance of new licenses and prohibited any change in source of supply, except under certain conditions. It also provided authority to establish prices below which milk could not be sold, without the necessity of a public hearing. The expiration date of the law was December 31, 1963.

Regulation H-13, issued on December 5, 1962, maintained the status quo of certain industry transactions for a period not to exceed 180 days. Producer discontinuance notices and requests to change source of supply were nullified as of December 5, 1962. Licenses could be issued and changes made only after certain stipulations had been met. The requirements that hearings be held on all applications and changes created a great difficulty. Therefore, the regulation was amended on February 8, 1963, permitting approval without hearings where it was proven that licenses were necessary to the health and welfare of the general public and where good cause was shown for the requested changes.

Regulation H-14, effective December 10, 1962, established a set of fixed prices below which licensees could not purchase or sell whole milk for a period not to exceed 180 days. Unlike previous price orders, prices were established only for milk sold in quarts, half-gallons and gallons, and applied to the entire State.

The 180-day period during which the regulations were to remain in effect expired early in June 1963. Since additional time was needed to make further cost studies, the director issued Regulation H-15 on June 3 extending H-13, as amended, and H-14 for another period not to exceed 180 days.

Regulation H-16

Although a public hearing to consider milk pricing in New Jersey was in progress, it was apparent that the pricing regulation in effect would expire before a decision could be reached. Therefore, Regulation H-16, effective December 5, 1963, was issued by the director extending the emergency pricing provisions established in Regulation H-14. The prices continued in effect through December 31, 1963, were as follows:

	Quart Container	Half-Gallon Container	Gallon Container
Home delivered:	$ 0.27	$ 0.52	$ 0.99
Wholesale, delivered into store:	0.23	0.41	0.79
Sold out of store:	0.25	0.44	0.87
Dealers and processors to subdealers:			
0 to 400 units	0.20	0.3850	0.76
401 to 1,200 units	0.19875		
1,201 to 2,000 units	0.19750		
2,000 or more units	0.19		

Chapter 165, P.L. 1963

Because certain conditions continued to exist which could impair or threaten the stability of the milk industry, a bill was passed by the State Legislature and signed by the Governor on December 10, 1963, extending the previous emergency law until March 31, 1964. This bill, which became Chapter 165, P.L. 1963, gave the director the power to set minimum prices for purchases and sales of milk until that time.

Regulation H-17

Immediately following the enactment of Chapter 165, P.L. 1963, Regulation H-17 was issued, effective December 11, 1963. This regulation set minimum prices for fluid milk sales at the same levels as established in H-16, and it superseded Regulations H-14, H-15 and H-16.

Public Hearings

Five studies were made of costs of operation in selected functions of the milk industry by Case and Company, the management consultant firm retained by the secretary of agriculture, and reports of each study were submitted to the secretary. In addition, the Advisory Committee of Economists appointed by the secretary submitted a report on their findings and recommendations for reorganization of economic regulation of the milk industry in New Jersey. Copies of all but one of these reports were mailed to industry members in November. At the same time, the director issued a notice of a public hearing (1) to consider the recommendations of the Advisory Committee and the reports submitted by Case and Company; and (2) to determine a future milk marketing program for New Jersey.

The hearing was held in Trenton on November 26 and 27, 1963. The economists' proposals and the cost studies were reviewed. The record indicated that elimination of price controls without a period of adjustment could be harmful to the dairy industry and could have an adverse effect on services rendered to consumers. A transitional period was recommended for the economic stability of the industry.

Another public hearing was announced by the director on December 4, 1963, for the purpose of establishing minimum prices of fluid milk at various points of distribution. This hearing commenced on December 9, and after 12 sessions was concluded on February 4, 1964. Eight attorneys, representing

the "jug" dealers, milk dealers and their organizations, subdealers and union groups, participated in the hearing procedures. A representative of Case and Company testified on the cost studies and supplied additional information in answer to questions regarding the reports. Four members of the Advisory Committee of Economists also submitted information. A total of 2,029 pages of testimony was taken, most of which was cross-examination on briefs and statements submitted.

Order 64-1

The findings of the series of cost studies, the recommendations of the committee of economists, and the testimony taken at the public hearings were used to develop a new price order. Order 64-1 was issued on February 17, 1964, and became effective March 31. It provides for changes in resale prices when producer prices for Class I (fluid) milk change from one range to another in the price schedules. The order contains two price schedules, one for the northern section of the State regulated by Federal Milk Marketing Order No. 2, and one for the southern area, now regulated by Federal Milk Marketing Order No. 4. Normally, producer prices in North Jersey fluctuate each month, but in South Jersey remain in effect for three-month periods. Under Order 64-1, the prices for April, May and June were less than those in effect under the emergency regulations and were among the lowest in the northeast section of the nation. The established minimum prices are for whole fluid white milk only. By-products, such as chocolate drink, buttermilk and cream products, are not price-controlled. No prices are set for milk sold to schools or governmental agencies. Notices are mailed to all licensees, except store owners, each month, indicating the applicable prices for the succeeding month.

The following schedule shows minimum prices for April, May and June:

	Northern New Jersey Area 1		Southern New Jersey Areas 2 and 3
	April	May and June	April, May and June
Home delivered			
Quart	$0.27	$0.26 1/2	$0.26 1/2
Half-gallon	.49	.48	.48
Gallon	.92	.90	.90
Delivered to stores (wholesale)			
Quart	.22	.21 1/2	.21 1/2
Half-gallon	.40	.39	.39
Gallon	.75	.73	.73
Sold out of stores			
Quart	.24	.23 1/2	.23 1/2
Half-gallon	.43	.42	.42
Gallon	.80	.78	.78
Delivered to subdealers			
0 - 400 (quart units)	.20	.19 1/2	.19 1/2
401 - 1,200 " "	.19 7/8	.19 3/8	.19 3/8
1,201 - 2,000 " "	.19 3/4	.19 1/4	.19 1/4
2,001 or more " "	.19	.18 1/2	.18 1/2
Half-gallon (any number of units)	.37 1/2	.36 1/2	.36 1/2
Gallon (any number of units)	.72	.70	.70

Appeals

Two firms, Cumberland Farms of New Jersey, Inc., a jug milk dealer, and an associate company, Burlington Food Stores, Inc., contested all of the emergency measures and the new price order almost immediately after each was issued. The first appeal contested the "Emergency Milk Control Law of 1962" and Regulations H-13 and H-14. Later appeals opposed Regulation H-15, H-16, Chapter 165, P.L. 1963, and Regulation H-17.

By the end of 1963, Cumberland Farms, which owns and operates the Burlington Food Stores, had obtained licenses for 37 dairy stores in New Jersey. In January 1964, during the course of the milk price hearings, the two affiliated companies offered refund coupons to customers who purchased gallons and half-gallons of milk. The coupons offered a refund of 18 cents a gallon and nine cents a half-gallon, redeemable if milk pricing was declared unconstitutional by the State Supreme Court as the result of the appeals. An order to cease and desist was sent by the director because the practice was considered a violation of Regulation H-5, which prohibits the giving or lending of anything of value in connection with the sale of milk.

The firms refused to comply with the director's order, and a permanent injunction was sought by the State to bar the distribution of the coupons. Both the Chancery Court and the Superior Court prohibited the issuance of the coupons, and the matter was then taken to the Supreme Court of New Jersey. This Court upheld the decisions of the lower courts, thus banning the coupon program.

During the time that the matter of the coupon program was being heard by the various courts, Official Order 64-1 was issued, establishing a new minimum resale price system. To further stress their position that there was no need for price controls in New Jersey, the two companies filed an appeal opposing the new price order. The Milk Control Law provides that an appeal creates an automatic stay which would have prevented the price order from taking effect until the appeal case was completed. Therefore, a motion to deny the stay was filed by the Office of Milk Industry. The Appellate Division of the Superior Court granted the motion, allowing the order to take effect on March 31, 1964.

Because the two emergency laws and the regulations issued in conjunction therewith had expired, the Superior Court of New Jersey issued an Order of Dismissal in May 1964, dismissing the appeal cases involving the emergency measures. However, at the close of the fiscal year, the case involving the validity and constitutionality of the pricing provisions of the law and Order 64-1 was pending before the Appellate Division of the Superior Court of New Jersey.

Southern New Jersey Becomes Part of Federal Order

For several years, consideration had been given to the advisability of some type of Federal milk regulation for the southern counties. Because of the competitive situation created by out-of-state supplies of milk, some producer organizations had petitioned the United States Department of Agriculture for a hearing to consider a separate Federal milk marketing order for this area

of the State as far back as 1959. Although a hearing had been announced in October 1961, and some proposals were submitted at that time, the hearing was not held. In the fall of 1962, many dairymen in South Jersey were threatened with loss of market as a result of the competition which developed during the period when fixed retail milk prices were suspended. In an effort to stabilize the market, State officials, agricultural representatives and producer organizations requested the United States secretary of agriculture to hold a hearing at the earliest possible date. This hearing was held in March and April of 1963 in Philadelphia.

A recommended decision was issued September 30, 1963. Exceptions and briefs were filed before October 14 and a final decision was announced October 31. The producer referendum supplied the required number of farmer votes, and the order became effective December 1, 1963.

The new order is known as the "Delaware Valley Order," and is Federal Milk Marketing Order No. 4. The order merged the former Philadelphia and Wilmington orders and extended the marketing area to include all of New Jersey not regulated by the New York-New Jersey order. This includes the counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer and Salem, and that part of Ocean County not included in Order No. 2. It provides for an individual handler type of pool for paying milk producers, as previously contained in the Philadelphia order, rather than the marketwide type used in the New York-New Jersey order. Other provisions were adopted regarding the classification and allocation of milk where more than one Federal order is involved, and pricing and pooling measures that will coordinate with other nearby Federal orders. The order also contains stipulations for administration, and records and reports to be maintained.

The first amendment to the order became effective on March 1, 1964. This change was the outcome of a Federal hearing held in May 1963 to consider amending the Class I and surplus milk pricing in the 10 Northeast Federal order markets. It did not involve any change in the New York-New Jersey order governing North Jersey, but it did revise the seasonal adjustments contained in the Delaware Valley Class I milk pricing formula. The amendment did not change the price level annually, but altered the relationship among the winter-spring-summer-fall Class I prices.

The inclusion of New Jersey handlers and farmers resulted in an increase in the Class I prices and the average of the handlers' uniform prices paid to dairymen in the entire Delaware Valley area. Following is a comparison of the prices paid the first six months under the new Order No. 4 with the combined prices for the same period last year under Philadelphia Order No. 4 and Wilmington Order No. 10.

	Order No. 4		Combined Orders Nos. 4 and 10	
	Class I	Average of Uniform Prices	Class I	Average of Uniform Prices
	1964	1964	1963	1963
January	$ 5.45	$ 5.06	$ 5.24	$ 4.72
February	5.45	5.03	5.24	4.72
March	5.60	5.03	5.24	4.65
April	5.20	4.74	4.84	4.30
May	5.20	4.66	4.84	4.26
June	5.20	4.75	4.84	4.32

The total number of producers regulated by Order No. 4 in June 1964, according to the Market Administrator's reports, was 5,748. Of this total, slightly more than 600 producers ship to New Jersey handlers in South Jersey, but only 345 are actually located in New Jersey.

Concurrent State Order No. 63-1

Based upon the Memorandum of Agreement between the director of the Office of Milk Industry and the secretary of the United States Department of Agriculture, the director issued Order 63-1, which specifies the same terms and provisions as the Delaware Valley Order. The State order was issued December 31, 1963, and became effective January 1, 1964. It was necessary to issue an amendment to Order 63-1, effective March 1, 1964, revising the seasonal adjustments so that the new State order would correspond in all respects to the Federal order governing South Jersey. The director will participate in all future hearings and resulting actions taken concerning the joint Federal-State order.

Federal Order No. 2 and State Order 57-3

Federal Order No. 2, which is known as the New York-New Jersey Milk Marketing Order, regulates payments to producers in the 13 northern counties of New Jersey, the New York metropolitan district and 35 counties or parts of counties in New York State. In order to administer this order effectively, the director promulgated State Order 57-3, which is enforced in the North Jersey area jointly with the Federal control.

No hearings were held during the 1963-64 period, but several major changes were made in the concurrent orders as a result of hearings conducted previously.

Following the April 1963 hearing, a recommended decision was announced in July 1963, proposing changes to the direct delivery differentials and tank truck service charges.

Direct delivery differentials are paid to those producers who are close to the market and whose milk is shipped direct from the farm to the pasteurizing and bottling plant, thus eliminating handlers' country receiving plant costs. The proposed amendment would reduce the direct delivery differential paid to dairymen.

Since December 1961, bulk tank milk was priced at the farm, and the hauling cost was paid by the handler. The amendment allowed handlers to negotiate with producers for a service charge not to exceed 15 cents per hundredweight for hauling bulk tank milk from the farm to the plant.

Four large producer cooperatives strongly opposed the recommended decision and asked that the proposals be withdrawn and a new tentative decision issued. The objections were based upon the reduced income that would result from the changes. Several meetings were attended by the director and deputy director to discuss this controversial decision with producer groups and Federal authorities.

Another recommended decision which had been issued June 10, 1963, was also pending. This proposal was to protect the order from the potentially price-depressing effects of sales of unregulated or "outside" milk within the marketing area and would act as a substitute for the compensatory payments which were invalidated by the United States Supreme Court in June 1962. This tentative decision was based on a hearing held in September 1962.

The two recommended decisions that were pending were revised and consolidated into one very lengthy proposed amendment. This was released October 31, 1963, and was submitted to dairy farmers for approval. Of those voting, 85.6 per cent favored the issuance of the amended order, and it became effective on January 1, 1964. The Office of Milk Industry officially posted an amendment to State Order 57-3, the concurrent order, in December, adopting the same provisions as those contained in the Federal decision. Following is a brief summary of the changes made in the amended orders.

1. The compensatory payment provisions were replaced with a comprehensive pooling plan that includes in the pool most milk regularly sold as Class I-A, and provision was made for payments to the producer settlement fund for milk not meeting the new pooling requirements.

2. It included the much-disputed provision for handlers to negotiate with producers for a tank truck service charge for hauling bulk tank milk. However, the original proposal permitted a rate up to 15 cents per hundredweight, but the revision reduced this to 10 cents.

3. It provided for easier flow of milk between the New York-New Jersey and other federally regulated markets, based upon assignment of the milk in the original market.

4. It required payment to the producer settlement fund on producer handler milk received by pool handlers and assigned to Class I-A or Class II utilization.

5. It extended the graduated scale of transportation differentials on Class I and uniform prices for pool plants located in areas beyond the 401 mile zone.

6. It confined the direct delivery differentials to the area within 70 miles of New York City at a rate of five cents per hundredweight on both can and bulk tank milk. This previously ranged from five cents per hundredweight for the 71-80 mile zone to 25 cents for those producers in the 1 - 10 mile zone.

The increase in interstate shipments of milk and changes in marketing conditions made it necessary to consider revising the Federal orders in the 10 Northeast markets to better align and coordinate the pricing provisions. Several hearings were held for this purpose, the first in 1959 and the most recent in May 1963. The decision issued in October 1963 stated that no revisions would be made at that time regarding the Class I (fluid) and Class III (surplus) prices in the New York-New Jersey order, nor any of the New England orders.

Because of the changes in Order No. 2, the Market Administrator issued an amendment to the Rules and Regulations governing the accounting procedures in December. The revisions were incorporated in the concurrent State order.

Budget

The total receipts transmitted to the General Treasury of the State of New Jersey during the period July 1, 1963, to June 30, 1964, by the Office of Milk Industry were $373,408.80. This amount was derived as follows:

License fees:	
For 1962-63 licenses, received after July 1, 1963	$ 3,080.00
For 1963-64 licenses, received July 1, 1963, to June 30, 1964	65,750.00
For 1964-65 licenses, received prior to June 30, 1964	299,934.60
Total license fees collected	$ 368,764.60
Penalties paid for violations of orders and regulations	4,545.00
Fees for calibration of glassware	99.20
Total all receipts	$ 373,408.80

The budget for the Office of Milk Industry is separate from that of the Department of Agriculture. The appropriation for the fiscal year 1963-1964 was $231,270. In accordance with provisions set forth in the budget, approval was obtained for additional funds out of receipts for costs of administration in addition to those specified in the budget. The Division requested and received $66,108 out of receipts in addition to the original appropriation to cover the additional costs. Therefore, the total funds available amounted to $297,378. The total expenditures during the period July 1, 1963, through June 30, 1964, amounted to $289,203.57.

Personnel

The Office of Milk Industry has 39 full-time positions, but several of these have remained vacant for long periods of time because of the difficulty encountered in recruiting qualified persons who meet the Civil Service specifications. One of the key positions, agricultural economist, has been vacant since November 1961. The supervising investigator position has been filled by a senior auditor since the latter part of 1961. An auditor position was open from July 1962 until May 1964. A problem has also been experienced in obtaining clerk-stenographers. At the close of the year, the

following positions were vacant: agricultural economist, supervising investigator, senior clerk bookkeeper and clerk-stenographer. Also, no temporary replacement could be obtained to perform the work of a clerk-stenographer who began a six-month leave of absence in June.

Chester D. Schomp, deputy director of the Office of Milk Industry since 1949, retired on June 30, 1964. David F. O'Brien was appointed by the director to succeed Mr. Schomp. No appointment has been made to the position of supervisor of licenses, which will be vacant when Mr. O'Brien's promotion becomes effective.

Other staff changes during the year included three resignations, four appointments, and one promotion which was made after reclassification of a position. A senior clerk-stenographer was transferred to the Division of Information and then transferred back to the Office of Milk Industry. This necessitated the creation of a temporary senior clerk position as the previous one had been filled by the promotion of an employee from another division.

The services of a special investigator who was temporarily transferred from the Department of Law and Public Safety in February 1963 were continued. Four temporary clerk-typist postions were created to assist with the issuance of licenses during May and June.

Milk Industry Meetings

The Office of Milk Industry was represented by the director or deputy director at 11 meetings held outside the State in connection with milk marketing conditions, Federal-State milk marketing orders and national dairy organizations.

The director and deputy director attended the annual meeting of the International Association of Milk Control Agencies held in Duluth, Minnesota, in September 1963. At the three-day conference, discussions included the bill introduced in Congress that would price milk being purchased through the United States Procurement Act; the differences between handler and marketwide pools used in Federal orders; and the many cases before the courts throughout the country on milk pricing and controls. A representative from England discussed "Milk Marketing in England."

The Fifth Annual Meeting of the Dairy Division of the National Association of State Departments of Agriculture was held in July in Dodge City, Kansas. The deputy director, who is vice-president of the Northeastern Section of the Dairy Division, attended the meeting. Reports were made on the proposed uniform labeling of milk on a national basis, sediment standards, quality programs, problems and research needs in the milk sanitation field and evaluation of Federal and State cooperative endeavors. The deputy director was appointed to the Committee on Milk Products, Definitions and Standards.

The director attended the Northeastern Dairy Conference and the Lehigh Valley Cooperative Farmers' meeting, both held in Allentown, Pennsylvania, in April.

The deputy director attended a two-day meeting of the National Task Force Committee in Washington, D.C., regarding the Government Milk Purchase Act (S.2146). This committee was organized in 1961 to study the problem of payment for milk sold to the United States Defense Department on which state-fixed prices could not be enforced. Legislation has been drafted and revised many times to be submitted for Congressional action.

Sixty-one meetings held within the State were attended by representatives of the Office of Milk Industry. Included in this group were the annual meetings of State and county producer groups, the New Jersey Milk Industry Association and the South Jersey Milk Dealers' Association; the monthly meetings of the Garden State Milk Council, the New Jersey Dairymen's Council; and numerous meetings in connection with the reorganization of the Office and the future milk regulatory program.

Thirty office conferences were conducted by the director or deputy director, mostly to discuss economic marketing conditions and problems confronting various industry groups. South Jersey dealers requested that a floor price be fixed for school milk sales because of the loss of contracts to dealers allegedly selling below cost. Other dealers who purchase raw milk supplies under Federal-State orders complained of the competition of unregulated milk. Because of the alleged illegal offers to gain subdealer business, the director held several meetings with dealer groups, warning them that the orders and regulations would be strictly enforced. Labor representatives requested that certain regulations be amended to permit temporary and immediate changes in sources of supply to prevent loss of business caused by picket lines where labor disputes existed.

BUREAU OF ENFORCEMENT

The main function of this bureau is to investigate alleged violations of the milk control law, orders and regulations, to check complaints and to make routine examinations. Investigators made a total of 7,687 calls, as follows: dealers, 249; subdealers, 232; stores, 6,887; consumers, 797; others 50; milk truck drivers to check route books, 272.

As a result of the store investigations, 1,070 applications and fees amounting to $10,700 were collected for store licenses; 1,116 stores previously licensed were reported out of business; and $165 was collected for bad checks submitted with applications for renewal of licenses. In addition, 49 apparent violations of regulations pertaining to minimum prices, free milk and changes of source of supply were reported.

Hearings

Previous to the issuance of Regulation H-13 in December 1962, two types of hearings were held, formal and informal. At formal hearings, licensees are usually legally represented and a record is made of the hearing. Upon receiving evidence of a violation at a formal hearing, the director may decline to grant a license or issue a conditional license, or he may suspend or revoke a license already in effect. Informal hearings may be conducted by the director or an employee designated by him, and no record is made. If it is established that a violation has been committed, a sum is set in adjustment.

The hearings held in accordance with Regulation H-13, as amended, did not involve infringements of the law, but were held, if requested, in those cases where permission to change source of supply was denied. Permission was granted if good cause was shown for the transfer, or if the previous supplier agreed to release the account. However, hearings were held in 11 cases, either because good cause was not established or the losing supplier contested the change. Of these, four were denied permission, three were granted approval, and four were cancelled when Regulation H-13, as amended, expired.

Several formal hearing matters which were carried over from the previous year were concluded during the 1963-64 period. National Dairy Products Corporation accepted a cease and desist order and agreed to pay a penalty of $1,000 on October 10, 1963, thus terminating a case which began in May 1962. The original order to show cause was issued because Sealtest Foods, Eastern Division of National Dairy Products, sold milk to Penn Fruit Company, a Philadelphia chain store organization, at prices less than the fixed minimums for dealer-to-store transactions. The director's decision that the license would be revoked unless the dealer agreed to charge the correct prices and pay a penalty of $25,000 was appealed to the Supreme Court of New Jersey. The Court upheld the director's decision, and ordered the company to cease and desist the below-price sales and to pay a penalty of $1,000. National Dairy applied for a stay of this order to further appeal the case. When the stay was denied, the company agreed to accept the State Supreme Court order.

Formal hearings which had been scheduled to be held during fiscal 1962-63 as a result of the distribution of refund coupons, were pending on July 1, 1963, for the following companies: Farm Fair Stores, Inc.; Meade Dairy, Inc.; Garden State Farms, Inc.; State Farm Stores, Inc.; Lampert Dairy Farms, Inc.; Farm Stores, Inc.; and Belleville Dairy, Inc. Unlike the more recent litigation on the same matter (see page 5) these licensees agreed to discontinue the rebate systems and not to redeem coupons already issued after the Appellate Division of the Superior Court of New Jersey decided that the practice was illegal. The formal hearings were cancelled.

In September 1963, the director rendered a decision denying the issuance of a milk dealer's license to Woodruff Dairy Company, based on testimony taken at a formal hearing held in January 1963. The license was denied because one of the officers listed on the application had been licensed previously, but the business failed because of financial instability. The matter was appealed to the State Superior Court and the director was ordered to take additional testimony. The hearing was continued on February 20, 1964, to establish the financial condition of the corporation. A supplemental determination was issued June 10, 1964, approving the issuance of the license upon the condition that Leslie T. Woodruff, Jr., the former licensee, would not be an officer of the corporation. However, at the close of the fiscal year, the license had not been issued because of the applicant's failure to pay the license fee.

A hearing concerning proper source of supply was held following a complaint from DeGraaf Dairy, Inc., a milk dealer, that Sun Ray Farms, Inc., a subdealer, had supposedly gone out of business, owing the dealer approximately $40,000. It was ascertained that another subdealer, Daniel Donovan, was serving the Sun Ray Farms customers and was purchasing his milk supplies from Westbrook

Farms, Inc. On July 10, the director issued a determination and order that Mr. Donovan must purchase his supply of milk from DeGraaf Dairy. Following the director's order, Mr. Donovan surrendered his license, and the routes in question were returned to Sun Ray Farms, Inc., which resumed purchases from DeGraaf Dairy, Inc., the same as the original arrangement.

A formal hearing was held in the matter of a disputed indebtedness between a subdealer, Michael J. Allora, and Borden Farm Products of New Jersey. The director ruled that the Office of Milk Industry had no cause for action and that the matter should be adjudicated by a court of proper jurisdiction.

The record of a formal hearing involving a dispute between two milk dealers, Westbrook Farms, Inc., and Durling Farms was settled by the parties concerned before the director issued a determination. Westbrook Farms accused Harold Berner, an employee of Durling Farms, of soliciting Westbrook customers. The customers had been previously served by Mr. Berner when he was employed by a subdealer firm which handled Westbrook Farms' milk. The attorneys representing the licensees notified the director that a settlement had been reached.

A formal hearing was scheduled in the matter of Joseph F. Ploger, who was charged with selling milk at less than the fixed minimum prices. The licensee requested that the matter be reverted to an informal hearing, at which time the director assessed a penalty of $1,000.

Based on alleged violations, 43 informal hearings were scheduled, but six of these were cancelled. Eleven dealers, 22 subdealers and four store operators were heard at informal hearings. Penalties were assessed for violations of Regulation H-5, which prohibits giving or lending something of value to customers or those solicited to be customers; selling milk at less than the established minimum prices; sales of milk by dealers to subdealers not authorized to purchase from them; subdealers and stores selling milk without being properly licensed; dealers and subdealers selling to stores not properly licensed; giving coupons good for free gallon jug deposits which, in effect, reduce the price of milk sold below the fixed minimum price; failure to have route books on trucks or failure to have store license numbers in the route books; and failure to file the monthly H-1A forms pertaining to wholesale accounts acquired or lost, and price information.

The total penalties imposed and accepted by licensees amounted to $6,280. Carried over from the previous fiscal year was a balance of $3,300, which had been assessed but not paid. Penalties collected during the year amounted to $4,545, and penalties suspended totaled $2,850. At the close of the fiscal year, unpaid penalties amounted to $2,185. Not included in these figures is $1,150 which was assessed at two hearings, but was not accepted by the licensees, and settlement is pending; and a $50 penalty which was suspended by the director after a review of the case.

Forms Processed

Regulations require that notices be filed with the Office of Milk Industry 60 days in advance of changes in source of supply. Store licensees who wish to change or add suppliers of milk products must file an H-2A form. In the case of other wholesale purchasers not required to be licensed, such as restaurants and bakeries, the distributor must file the 60-day notice on an H-8A form. Following is an account of the number of forms received and the action taken.

	H-2A	H-8A
Balance on hand July 1, 1963	95	74
Received during the year	587	282
Approved	273	181
Denied	193	104
Withdrawn, cancelled, returned	103	39
Balance June 30, 1964, pending completion of 60-day period	113	42

Each H-2A form received requires the mailing of form H-2B to the losing supplier or suppliers and form H-2D to the store requesting permission to change or add suppliers. At the completion of the 60-day period, an H-2C or H-2C(R) form is mailed, either approving or denying the change. The procedure of H-8A forms is very much the same. The total number of H-2A, H-8A and allied forms handled during the year was 3,066.

Regulation H-13, as amended, effective during the fiscal year until November 30, 1963, required that a notarized statement be submitted showing good cause for the intended change. Of the 251 forms processed during the period July 1 to November 30, 227 were denied approval to change and only 24 were approved. When Regulation H-13 expired early in December 1963, the director ruled that all notices pending would be considered null and void and, as a result, 100 forms on hand at that time were cancelled.

Under the provisions of Regulation H-1, all licensees except stores are required to file an H-1A form each month, showing information pertaining to wholesale accounts acquired or lost and indicating any sales or purchases made at less than the established minimum prices. The total number of H-1A forms received and processed during the year was 27,066.

Contracts for Refrigeration Units

Regulation F-27 requires licensees to submit a copy of a bill of sale or contract for lease or rental for all refrigeration units sold or rented to milk customers. Upon receipt and approval of the contract, a letter of notification is forwarded to the dealer or subdealer with an equipment seal to be attached to the refrigeration unit. Each seal has a separate registration number supplied by this office. Bills of sale for refrigeration units sold for cash or on an installment plan are approved and filed. During the fiscal year, 295 equipment seals were issued and 34 bills of sale were received.

Milk Test Inspection

Milk test inspectors made 1,208 calls, as follows: milk dealers, 419; milk plants, 291; farms, 331; weighers and samplers, 91; others, 71. As a result of these calls, 8,540 fresh and composite milk samples were picked up and tested to verify the butterfat reports submitted by licensees.

Fourteen producers were paid an additional $233.52 due to a difference in butterfat tests reported and those determined from the sample checks. One dealer has been ordered to appear for an informal hearing in July 1964 on the basis of an inspection of his bulk tank truck. He is charged with allowing an unauthorized person to pick up milk at dairies with bulk holding tanks.

Ninety-eight permits to purchase on a butterfat basis, 377 tester licenses and 425 weigher and sampler certificates were issued during the fiscal year. In addition, 24 applicants for milk testers' licenses were given examinations.

A total of 2,874 pieces of glassware used for testing butterfat content of milk and cream was calibrated. Of these, 125 pieces were rejected for not meeting the required specifications. The charge for the calibration work was $143.70, and the balance due from the previous year was $57.20, making a total accounts receivable of $200.90. Of this amount, $99.20 has been received, leaving a balance of $101.70 owing at the end of the year.

A survey conducted during the year disclosed that there were 1,978 bulk milk holding tanks located on New Jersey dairy farms in January 1964. In 1957, the first year the number of bulk milk holding tanks in New Jersey was recorded, there were only 634.

BUREAU OF LICENSING

The Milk Control Law provides that no milk dealer, processor, subdealer or store may be engaged in the handling of milk within this State unless duly licensed. All licenses issued under the provisions of this act become effective July 1 and all licenses, regardless of the date of issuance, expire on June 30. All renewal licenses are imprinted by the IBM section of the Department of Agriculture.

License fees paid by milk dealers are based on the average quantity of milk sold monthly, and range from $20 for sales not exceeding 2,500 pounds to $2,080 for sales exceeding 5,000,000 pounds. Subdealer fees are based on the number of routes operated at $30 per route. The processor fee is $650, the manufacturer fee is $150, and the store fee is $10. Vending machines are classified as stores and the fee is $10 for each machine.

The following table shows the number of licenses issued for the year 1963-64, compared with the number issued for 1962-63. Also shown in the table is the number of licenses issued for the year 1937-38, the first available complete record of licenses issued in each category, as taken from the "Report of the New Jersey Milk Control Board" published in May 1939.

Type of License	1963-64	1962-63	1937-38
Stores	13,528	14,181	11,149
Vending machines	1,108	1,341	...
Dealers	158	159	308
Processors	28	25	...
Producer-dealers	49	64	1,153
Manufacturers	19	24	24
Subdealers	1,693	1,733	1,292

These figures do not represent the actual number of licenses in effect as there are many cancellations during the year which are not eliminated from the above figures. Licenses were not issued for vending machines prior to 1960.

The number of subdealers increased from 1,292 in June 1938 to 2,070 in the 1958-59 fiscal year. Since that time, there has been a gradual decrease each year. However, the greatest change in any category during the history of milk control in New Jersey is the decrease in the number of producer-dealers. Many of those licensed as producer-dealers were farmers who produced milk for their own use, but who sold small quantities, mostly during the flush season of production, to neighbors. Price-fixing orders, increases in license fees, and health laws which prohibited sales of raw milk in many localities brought about a rapid decline in this licensing classification. The rate of decrease was greatest during the period from 1938, when there were 1,153 licensed producer-dealers, to 1950, when the number dropped to 268. The number of licenses of this type has continued to decline at the rate of about 15 each year.

BUREAU OF AUDITING

Reports

Reports showing production, purchases and sales of milk and other dairy products, and price information were filed each month by milk dealers, processors and producer-dealers. Forms were provided for this purpose by the Office of Milk Industry. Because the Federal market administrators also require monthly reports, milk dealers complained of duplication and difficulty in completing the two sets of forms. After several conferences, it was decided that copies of the producer payroll information, as submitted to the market administrators, would be accepted by the Office of Milk Industry.

During 1963-64, a total of 2,139 reports was audited. The data obtained from the reports were used to prepare monthly and annual statistics and to provide information on dairy industry trends. Statistical summaries were supplied to several branches of the United States Department of Agriculture for use in publications, to dairy industry organizations, and to other state government agencies and agricultural colleges.

Sales in Larger Size Containers Increase

Because of the growing interest in sales trends, tables were prepared each month showing the breakdown of sales in various size containers. One table was a comparison of the units of each size container sold in the most recent month for which figures were available with units sold during the same month of the previous year. The per cent of change, and the change in the volume of milk sold in each container size converted to quart equivalents were indicated. Tables were also prepared showing the daily average sales in quarts, half-gallons and gallons for each month during the past year. A comparison of units sold in June 1964 with units sold in June 1963 shows that the number of gallon containers of milk sold increased almost 75 per cent and half-gallons increased 20 per cent, but the number of quart containers sold declined 15 per cent. Additional data on packaged sales of milk are explained in the section, " Milk Production, Disposition and Income."

Producer Payments

In addition to providing dairy industry statistics, the monthly reports were audited to determine if producers had been paid properly for milk deliveries. From July 1 to December 1, 1963, approximately 234 producers were paid under Office of Milk Industry price orders. During that period, it was determined that total underpayments to producers regulated by the State orders amounted to $412.91. The balance owed as of July 1, 1963, was $797.82, making a total of $1,210.73 due producers. Of this amount, $756.17 has been paid, leaving a balance of $454.56 still owing. Since December 1, 1963, prices to producers throughout the State have been regulated by the Federal orders. In June 1964, approximately 1,880 New Jersey producers were paid under Order No. 2 regulations and about 345 producers were paid in accordance with Order No. 4 regulations. Discrepancies in producer payments under Federal regulations are not included in the above figures.

Field Assignments

Ten field assignments were completed in 1963-64. Records of licensees were examined to determine if price regulations had been violated; if sales were made to unlicensed subdealers; to check business operations for proper licensing classification; to obtain information in connection with subdealer businesses which had been abandoned to avoid payment of debts for milk purchases; and to clarify data submitted on monthly reports. In some cases, the findings were used as evidence in connection with hearings.

Miscellaneous

All applications for licenses, except for stores and vending machines, were checked to determine if any changes had been made in ownership, types of operation, or classification, and to ascertain if proper fees had been paid. License fees paid by dealers and producer-dealers were computed from sales shown on monthly reports and were verified with figures shown on applications.

Subdealer applications were also checked for sources of supply, which must agree with the records maintained. Before a subdealer may change his source of supply, he must file a notice 60 days in advance of the intended change. Prior to the expiration of the 60-day period, the dealer or processor losing the account is offered an opportunity for a conference. If no conference is requested, approval for the change is granted, provided there is no indebtedness. However, if there is any indication of an illegal offer being made by the dealer taking on the account, or if there is any dispute regarding money owed for milk supplies purchased, all parties concerned are notifed to appear to discuss the matter. During 1963-64, 84 requests were received from subdealers, an increase of 32 over the previous year. Of these, 25 were approved, five were denied, and the balance of 54 were withdrawn or cancelled.

The tables appended to this report were prepared by this Bureau.

MILK PRODUCTION, DISPOSITION AND INCOME

Production

Total milk production in New Jersey has been gradually declining since the 1960-61 period. However, the change has been slight considering the great decrease in the number of dairy farms and cow population. The number of producers shipping milk to New Jersey dealers decreased from 4,253 in 1953-54 to 2,538 in 1963-64. The cow population declined from approximately 152,000 to 117,000 during the same 10-year period. Despite the 40 per cent drop in the number of producers and 23 per cent decrease in cow numbers, milk production as reported by dealers and producer-dealers in New Jersey was only 4.45 per cent less in 1963-64 than in fiscal 1953-54. The level of production remained fairly stable because milk production per cow increased from an annual total of 7,580 pounds in 1953 to 9,690 pounds in 1963.

Total milk production in New Jersey as reported by dealers and producer-dealers, exclusive of milk used on farms, was 1,057,633,475 pounds. This was 4.595 per cent less than the previous year's production. The greater percentage of decline was in the southern area of the State, but this could be partially attributed to the transferring of producers from that area to North Jersey markets. Production statistics are shown in Table 1.

Prices

The average price per hundredweight paid to dairymen shipping to New Jersey handlers in 1963-64 was eight cents more in North Jersey and five cents more in South Jersey than the previous year's prices. The average price paid for milk deliveries on a statewide basis was $5.11 per hundredweight, an increase of seven cents over last year. However, total shipments of milk and gross income continued to decline. These changes are shown in detail in Tables 2, 3 and 4.

Sales of Fluid Milk and Cream

Fluid milk sales have increased for the fourth consecutive year. New Jersey handlers reported that 881,234,218 quarts of fluid milk were sold in New Jersey in 1963-64, an increase of 2.872 per cent over 1962-63 sales. Sales of cream in New Jersey have increased each year since 1957-58, and during the past fiscal year exceeded 125 million quarts, fluid milk equivalent. This represented an increase of 1.416 per cent over the previous year. Monthly sales figures and yearly totals are shown in Tables 5 and 6.

Per capita consumption of whole and skim milk in New Jersey was up almost three pounds in 1963 to 309 pounds, according to Federal reports. This is about eight-tenths of a pint per day.

The quart size container continues to be the most popular in New Jersey, although sales in gallon and half-gallon containers are steadily increasing. Of the total volume of packaged milk sold in New Jersey in 1963-64, quart sales represented 53 per cent; half-gallons, 31 per cent; gallons, 9 per cent; and pints and half-pints, 7 per cent. These figures for the previous year were: quarts, 63 per cent; half-gallons, 25 per cent; gallons, 5 per cent; pints and half-pints, 7 per cent. Table 7 shows packaged sales of fluid milk by New Jersey handlers. Instead of showing the actual units of each container size sold, all sales have been converted to quart equivalents for comparison of the quantities of milk involved. In 1963-64, sales of milk in quarts decreased 14.7 per cent from the previous year, but this decline was more than offset by the decided increases in sales in the larger size containers.

Exports and Imports of Milk and Cream

Unlike the previous year, exports of milk increased in 1963-64. Table 8 shows that 210,429,265 quarts of milk were exported this year, an increase of 1.04 per cent over 1962-63 exports.

Total imports of milk for use in New Jersey advanced more than 10 per cent in 1963-64 over the previous year. The total quantity of milk imported exceeded the total milk production in New Jersey during the last three fiscal years. Imports of cream for use in New Jersey also increased in 1963-64, although the change amounted to only 2.478 per cent. Additional statistics pertaining to exports and imports of milk and cream may be found in Tables 9 and 10.

The 1962-63 totals shown in the tables appended to this report are revised figures, and, therefore, will show slight differences from those used in previous reports.

TABLE 1. PRODUCTION OF MILK AS REPORTED BY DEALERS AND PRODUCER-DEALERS IN NEW JERSEY

(Pounds)

1963-1964

1963	North Jersey	South Jersey	New Jersey Total
July	68,506,078	16,055,225	84,561,303
August	68,287,435	16,407,802	84,695,237
September	64,702,557	15,612,893	80,315,450
October	66,801,421	16,026,454	82,827,875
November	65,821,949	15,561,673	81,383,622
December	70,480,203	15,662,190	86,142,393
1964			
January	73,440,434	16,240,442	89,680,876
February	71,751,905	15,032,577	86,784,482
March	80,368,738	15,807,503	96,176,241
April	80,483,987	14,917,386	95,401,373
May	85,330,341	15,509,980	100,840,321
June	75,698,401	13,125,901	88,824,302
Total	871,673,449	185,960,026	1,057,633,475
Monthly average	72,639,454	15,496,669	88,136,123
Total 1962-63	896,820,522	211,754,661	1,108,575,183
Per cent change 1963-64 compared with 1962-63	-2.815	-12.191	-4.595

TABLE 2. PRODUCERS, MILK DELIVERED, AMOUNT PAID AND AVERAGE PRICE PER MONTH NORTH JERSEY

1963-1964

	Number of Producers	Total Quantity of Milk (lbs.)	Total Amount of Money Paid	Average Price Per Month (cwt.)
1963				
July	1,900	65,106,304	$3,055,886.63	$4.69
August	1,881	64,794,600	3,248,928.70	5.01
September	1,881	61,613,333	3,261,478.30	5.29
October	1,876	63,594,102	3,478,418.16	5.47
November	1,879	62,654,214	3,424,118.91	5.47
December	1,873	67,079,970	3,627,240.03	5.41
1964				
January	1,873	70,237,336	3,738,005.50	5.32
February	1,853	68,608,517	3,544,398.60	5.17
March	1,856	76,889,501	3,828,250.17	4.98
April	1,890	77,099,432	3,617,862.09	4.69
May	1,868	81,949,379	3,637,587.15	4.44
June	1,881	72,541,240	3,222,478.76	4.44
Total		832,167,928	$41,684,653.00	
Average	1,876	69,347,327	3,473,721.08	$5.03
1962-63	1,977	856,539,432	42,266,707.83	4.95
Per cent change 1963-64 compared with 1962-63	-5.109	-2.845	-1.377	+1.616

TABLE 3. PRODUCERS, MILK DELIVERED, AMOUNT PAID AND AVERAGE PRICE PER MONTH SOUTH JERSEY

1963-1964

	Number of Producers	Total Quantity of Milk (lbs.)	Total Amount of Money Paid	Average Price Per Month (cwt.)
1963				
July	472	15,593,654	$838,620.59	$5.38
August	469	15,921,952	862,682.15	5.42
September	466	15,208,043	844,948.37	5.56
October	458	15,605,470	900,487.09	5.77
November	457	15,152,060	876,879,08	5.79
December	432	15,389,857	896,280.40	5.82
1964				
January	430	15,955,662	888,708.98	5.57
February	404	14,764,706	818,674.35	5.55
March	397	15,504,743	850,165.66	5.48
April	370	14,615,514	758,307.71	5.19
May	363	15,200,246	765,443.94	5.04
June	345	12,836,581	645,992.80	5.03
Total		181,748,488	$9,947,191.12	
Average	422	15,145,707	828,932.59	5.47
1962-63	510	205,121,352	11,111,050.64	5.42
Per cent change 1963-64 compared with 1962-63	-17.255	-11.395	-10.475	+.923

TABLE 4. PRODUCERS, MILK DELIVERED, AMOUNT PAID AND AVERAGE PRICE PER MONTH NEW JERSEY

1963-1964

	Number of Producers	Total Quantity of Milk (lbs.)	Total Amount of Money Paid	Average Price Per Month (cwt.)
1963				
July	2,372	80,699,958	$3,894,507.22	$4.83
August	2,350	80,716,552	4,111,610.85	5.09
September	2,347	76,821,376	4,106,426.67	5.35
October	2,334	79,199,572	4,378,905.25	5.53
November	2,336	77,806,274	4,300,997.99	5.53
December	2,305	82,469,827	4,523,520.43	5.49
1964				
January	2,303	86,192,998	4,626,714.48	5.37
February	2,257	83,373,223	4,363,072.95	5.23
March	2,253	92,394,244	4,678,415.83	5.06
April	2,260	91,714,946	4,376,169.80	4.77
May	2,231	97,149,625	4,403,031.09	4.53
June	2,226	85,377,821	3,868,471.56	4.53
Total		1,013,916,416	$51,631,844.12	
Average	2,298	84,493,035	4,302,653.68	$5.11
1962-63	2,487	1,061,660,784	53,377,758.47	5.04
Per cent change 1963-64 compared with 1962-63	-7.600	-4.497	-3.271	+1.389

TABLE 5. SALES OF FLUID MILK REPORTED BY NEW JERSEY HANDLERS

(Quarts)

1963-1964

	North Jersey	South Jersey	New Jersey Total
1963			
July	54,083,760	17,343,905	71,427,665
August	55,613,524	18,526,104	74,139,628
September	55,761,400	16,320,004	72,081,404
October	60,237,343	17,830,979	78,068,322
November	56,080,808	16,716,032	72,796,840
December	57,383,020	16,172,973	73,555,993
1964			
January	58,356,187	16,875,023	75,231,210
February	54,781,134	16,129,898	70,911,032
March	57,817,241	16,666,934	74,484,175
April	56,937,734	16,645,246	73,582,980
May	56,895,088	16,958,374	73,853,462
June	54,469,407	16,632,100	71,101,507
Total	678,416,646	202,817,572	881,234,218
Average	56,534,721	16,901,464	73,436,185
Total 1962-63	664,017,037	192,612,892	856,629,929
Per cent change 1963-64 compared with 1962-63	+2.168	+5.298	+2.872

TABLE 6. SALES OF CREAM AS REPORTED BY NEW JERSEY PLANTS

(Reported in fluid milk equivalent quarts)

1963 - 1964

	North Jersey	South Jersey	New Jersey Total
1963			
July	8,712,667	2,053,649	10,766,316
August	8,497,868	2,188,960	10,686,828
September	7,928,613	1,555,194	9,483,807
October	8,161,906	1,546,810	9,708,716
November	8,466,428	1,605,361	10,071,789
December	11,072,643	1,789,127	12,861,770
1964			
January	8,161,734	1,403,620	9,565,354
February	7,926,196	1,418,546	9,344,742
March	8,698,320	1,698,191	10,396,511
April	9,048,573	1,527,091	10,575,664
May	8,696,300	1,701,485	10,397,785
June	9,522,007	1,885,666	11,407,673
Total	104,893,255	20,373,700	125,266,955
Average	8,741,105	1,697,808	10,438,913
Total 1962-63	102,812,906	20,705,333	123,518,239
Per cent change 1963-64 compared with 1962-63	+2.023	-1.602	+1.416

TABLE 7. PACKAGED SALES OF FLUID MILK REPORTED BY NEW JERSEY HANDLERS[1]

(All sizes converted to quart equivalent)

1963 - 1964

1963	Half-pints	Pints	Quarts	Half-gallons	Gallons	Total Quarts
July	1,575,048	653,992	39,611,657	20,670,078	4,718,364	67,229,139
August	1,521,941	720,648	40,254,678	22,125,300	4,999,824	69,622,391
September	4,344,259	746,645	38,351,311	20,324,790	4,707,840	68,474,845
October	5,970,629	867,251	40,013,784	21,738,392	5,454,700	74,044,756
November	4,204,099	635,775	37,850,319	21,190,640	5,229,124	69,109,957
December	3,988,200	596,764	37,182,959	22,326,348	5,982,188	70,076,459
1964						
January	4,831,101	663,088	37,331,905	22,933,808	6,065,788	71,825,690
February	4,710,319	614,044	34,420,294	21,783,534	6,097,112	67,625,303
March	5,032,683	700,885	35,600,754	22,791,236	6,577,884	70,703,442
April	5,084,489	706,520	34,284,526	22,422,492	7,162,928	69,660,955
May	5,249,841	732,616	34,176,406	22,418,452	7,560,088	70,137,403
June	3,258,458	735,282	33,211,337	22,226,742	7,700,936	67,132,755
Total	49,771,067	8,373,510	442,289,930	262,951,812	72,256,776	835,643,095
Average	4,147,589	697,793	36,857,494	21,912,651	6,021,398	69,636,925
Total 1962-63	44,700,062	8,477,126	518,306,133	201,453,746	44,387,140	817,324,207
Per cent of change 1963-64 as compared with 1962-63	+11.345	-1.222	-14.666	+30.527	+62.788	+2.241

[1]Dealer-to-dealer sales and bulk milk sales are not included in the above figures.

TABLE 8. EXPORTS OF NEW JERSEY PRODUCED MILK

(Pounds)

1963 - 1964

	North Jersey	South Jersey	New Jersey Total
1963			
July	12,308,866	3,624,671	15,933,537
August	12,244,972	3,676,403	15,921,375
September	10,503,674	3,132,894	13,636,568
October	11,158,865	3,443,668	14,602,533
November	13,336,028	3,420,377	16,756,405
December	13,690,823	3,269,632	16,960,455
1964			
January	16,490,776	2,265,295	18,756,071
February	16,807,578	2,264,340	19,071,918
March	21,701,957	2,231,233	23,933,190
April	17,504,308	2,210,947	19,715,255
May	17,085,184	2,492,710	19,577,894
June	13,474,829	2,089,235	15,564,064
Total	176,307,860	34,121,405	210,429,265
Average	14,692,322	2,843,450	17,535,772
Total 1962-63	165,319,255	42,949,730	208,263,985
Per cent change 1963-64 compared with 1962-63	+6.647	-20.555	+1.04

TABLE 9. IMPORTS OF MILK FOR NEW JERSEY UTILIZATION

(Pounds)

1963 - 1964

	North Jersey	South Jersey	New Jersey Total
1963			
July	73,876,294	26,187,938	100,064,232
August	77,016,921	28,811,723	105,828,644
September	83,293,383	24,639,414	107,932,797
October	89,688,240	27,032,918	116,721,158
November	80,351,956	24,516,107	104,868,063
December	83,628,453	20,267,428	102,895,881
1964			
January	83,217,221	18,641,908	101,859,129
February	77,359,902	19,007,783	96,367,685
March	80,625,289	21,269,196	101,894,485
April	76,307,741	22,454,272	98,762,013
May	74,873,794	24,559,753	99,433,547
June	74,516,478	20,759,017	95,275,495
Total	954,755,672	278,147,457	1,232,903,129
Average	79,562,973	23,178,955	102,741,927
Total 1962-63	854,325,159	264,513,939	1,118,839,098
Per cent change 1963-64 compared with 1962-63	+11.756	+5.154	+10.195

TABLE 10. CREAM IMPORTED FOR USE IN NEW JERSEY

(Reported in fluid milk equivalent pounds)

1963 - 1964

	North Jersey	South Jersey	New Jersey Total
1963			
July	19,006,136	2,464,044	21,470,180
August	16,114,163	2,788,124	18,902,287
September	12,920,356	2,050,999	14,971,355
October	12,264,827	1,648,861	13,913,688
November	12,528,525	1,780,655	14,309,180
December	17,321,990	1,962,547	19,284,537
1964			
January	12,190,683	1,508,197	13,698,880
February	12,826,111	1,545,675	14,371,786
March	13,854,084	1,925,297	15,779,381
April	15,293,969	1,704,066	16,998,035
May	16,903,957	2,519,289	19,423,246
June	20,077,757	3,707,440	23,785,197
Total	181,302,558	25,605,194	206,907,752
Average	15,108,547	2,133,766	17,242,313
Total 1962-63	179,018,177	22,887,199	201,905,376
Per cent change 1963-64 compared with 1962-63	+1.276	+11.876	+2.478

OFFICIAL PROCEEDINGS OF THE FORTY-NINTH

ANNUAL STATE AGRICULTURAL CONVENTION

The forty-ninth annual State Agricultural Convention was held in the Assembly Chamber of the State Capitol in Trenton, on Thursday, January 30, 1964. The meeting was called to order at 9:30 a.m. by Reginald V. Page, president of the State Board of Agriculture. The invocation was offered by the Reverend Ansley G. Van Dyke, pastor of the Presbyterian Church of Toms River.

The roll of delegates was called by Secretary of Agriculture, Phillip Alampi as follows:

DELEGATES OF THE STATE AGRICULTURAL CONVENTION

From County Boards of Agriculture

Name	Address	County
Louis M. Dalponte	Richland	Atlantic
John Melora	Hammonton	Atlantic
William Albert	Paramus	Bergen
Harry L. Marek	Westwood	Bergen
Lester C. Jones, Sr.	Medford	Burlington
Clement B. Lewis	Riverton	Burlington
Thomas Battaglia	Elm	Camden
Joseph B. Sergi	Cherry Hill	Camden
Walter Betts	Woodbine	Cape May
Bolton LeGates	Cape May	Cape May
Louis Galetto, Jr.	Vineland	Cumberland
Louis Romano	Cedarville	Cumberland
William Crane	Caldwell	Essex
John Harth	West Orange	Essex
William Filemyr	Bridgeport	Gloucester
Nick Super	Westville	Gloucester
Harry Callari	Jersey City	Hudson
Enzo DeLuca	Jersey City	Hudson
William Kinney	Asbury	Hunterdon
Philip Mowery	Lambertville	Hunterdon
Benjamin Hart, Sr.	Pennington	Mercer
Donald H. Woodward	Pennington	Mercer
Raymond Baker	Deans	Middlesex
Chester A. Steen	Plainsboro	Middlesex
Albert Punk	Imlaystown	Monmouth
Richard Satterthwaite	Cream Ridge	Monmouth
Anthony Cerbo, Jr.	Parsippany	Morris
Andrew Hamilton	Boonton	Morris
Daniel M. Crabbe	Toms River	Ocean
Michael Stosz	Van Hiseville	Ocean
George A. Ehrle	Clifton	Passaic
Chester J. Krulan	Clifton	Passaic

Harry DuBois	Pedricktown	Salem
Roy G. Powers	Woodstown	Salem
Gilbert I. Runyon	Belle Mead	Somerset
Chris Van Arsdale	Neshanic Station	Somerset
R. V. Armstrong, III	Branchville	Sussex
H. Emerson Powell	Stillwater	Sussex
Wilfred Haines	Union	Union
Walter M. Ritchie	Colonia	Union
Robert F. Hoser	Washington	Warren
Stewart S. Johnson	Great Meadows	Warren

From State and Pomona Granges

Clinton H. Cowperthwaite	Moorestown	State Grange
W. Ellsworth Oberly	Stewartsville	State Grange
Martin Decker	Hammonton	Atlantic
Arthur Butt	Morris Plains	Bergen-Passaic
C. Harold Joyce	Jobstown	Burlington
Reuben H. Dobbs	Glendale	Camden
Allen McClain	Green Creek	Cape May
Robert W. Sheerin	Morris Plains	Central District
Leon Spencer	Millville	Cumberland
Carlton S. Carter	Clarksboro	Gloucester
Floyd Yonkauske	Pittstown	Hunterdon
Wilbert T. Overholt	Titusville	Mercer
J. V. S. Dumont	Somerville	Middlesex-Somerset
Howard P. Story, Sr.	Freehold	Monmouth
Alvin L. Yeagle	Elmer	Salem
George Gass	Augusta	Sussex
John Hamlen	Stewartsville	Warren

From Other Organizations

American Cranberry Growers' Association -- Stephen Lee, Chatsworth; Edward V. Lipman, New Brunswick.

Jersey Chick Association -- Louis D. Schaible, Shiloh; J. C. Taylor, New Brunswick.

New Jersey Association of Nurserymen -- Roland DeWilde, Bridgeton; Edward S. Wyckoff, Bedminster.

New Jersey State Florists' Association -- Carl J. Klotz, Robbinsville; Lester G. Pyle, Gillette.

New Jersey State Horticultural Society -- C. William Haines, Sr., Masonville; Charles E. Maier, Pine Brook.

New Jersey State Poultry Association -- Robert Herman, Freehold; John Vaccaro, Princeton.

United Milk Producers Cooperative Association of New Jersey -- Herman Durr, Jr., Wrightstown; G. Clayton Stocker, Alpha.

Cooperative Growers' Association, Inc. -- Herbert O. VanSciver, Levittown.

The Cooperative Marketing Associations in New Jersey, Inc. -- Victor Lenco, Robbinsville.

New Jersey Agricultural Experiment Station -- John K. Medoff, West New York.

New Jersey Beekeepers Association -- William Garthe, Hanover.

New Jersey College of Agriculture -- Dr. Leland G. Merrill, Jr., New Brunswick.

New Jersey Crop Improvement Association -- John Carson, Moorestown.

New Jersey Guernsey Breeders' Association, Inc. -- Dr. J. Ellis Croshaw, Jr. Wrightstown.

New Jersey Holstein-Friesian Cooperative Association, Inc. -- Charles H. Kirby, Harrisonville.

New Jersey State Potato Association -- John Pollak, Cranbury.

Tru-Blu Cooperative Association -- Fred E. Scammell, Toms River.

E. B. Voorhees Agricultural Society -- William M. Nulton, Jr., Somerset.

APPOINTMENT OF COMMITTEES

The following committees were appointed by President Page:

Nominating Committee for Members of the State Board of Agriculture

Robert F. Hoser, Chairman	Warren County Board of Agriculture
Clement B. Lewis, Vice-chairman	Burlington County Board of Agriculture
R. V. Armstrong, III	Sussex County Board of Agriculture
Harry Callari	Hudson County Board of Agriculture
William A. Crane	Essex County Board of Agriculture
Martin Decker	Atlantic County Pomona Grange
Reuben H. Dobbs	Camden County Pomona Grange
Wilfred Haines	Union County Board of Agriculture
Andrew Hamilton	Morris County Board of Agriculture
Robert Herman	New Jersey State Poultry Association
Charles H. Kirby	New Jersey Holstein-Friesian Association, Inc.
Carl J. Klotz	New Jersey State Florists' Association, Inc.
Chester J. Krulan	Passaic County Board of Agriculture
Bolton LeGates	Cape May County Board of Agriculture
Harry L. Marek	Bergen County Board of Agriculture
Dr. Leland G. Merrill, Jr.	New Jersey College of Agriculture
Fred E. Scammell	Tru-Blu Cooperative Association
Leon Spencer	Cumberland County Pomona Grange
Philip Mowery	Hunterdon County Board of Agriculture
Edward S. Wyckoff	New Jersey Association of Nurserymen
Alvin L. Yeagle	Salem County Pomona Grange

Committee on Resolutions

William Filemyr, Chairman	Gloucester County Board of Agriculture
Thomas Battaglia	Camden County Board of Agriculture
Herman Durr, Jr.	United Milk Producers of New Jersey
George Gass	Sussex County Pomona Grange
John Hamlen	Warren County Pomona Grange
Charles E. Maier	New Jersey State Horticultural Society
John Melora	Atlantic County Board of Agriculture
J. C. Taylor	Jersey Chick Association

Committee on Credentials

Gilbert I. Runyon, Chairman	Somerset County Board of Agriculture
John K. Medoff	New Jersey Agricultural Experiment Station
Wilbert T. Overholt	Mercer County Pomona Grange
John Pollak	New Jersey State Potato Association
Donald H. Woodward	Mercer County Board of Agriculture

Committee to Escort the Governor

William M. Nulton, Jr., Chairman	E. B. Voorhees Agricultural Society
Raymond Baker	Middlesex County Board of Agriculture
Clinton H. Cowperthwaite	New Jersey State Grange
William Kinney	Hunterdon County Board of Agriculture
Roy G. Powers	Salem County Board of Agriculture

REPORT OF COMMITTEE ON CREDENTIALS

The credentials committee examined the certificates of delegates and reported them in order.

ELECTION OF MEMBERS OF THE STATE BOARD OF AGRICULTURE

The chairman of the nominating committee placed the names of Elia Clemenson, a poultryman of Dorothy, Atlantic County and Charles V. N. Davis, a dairyman of Somerville, Somerset County, in nomination for membership on the State Board of Agriculture. There being no further nominations, the Secretary cast a ballot to make this election unanimous.

CITATIONS

Citations for distinguished service to agriculture were awarded to the following: William A. Crane of West Caldwell; Harry Deverman of Clifton; Amos Kirby of Mullica Hill; and Michael J. Klein of Blairstown.

The citations, read by Secretary of Agriculture, Phillip Alampi, were as follows:

Citation of William A. Crane

New Jersey is proud to recognize you as one of the outstanding sons of her soil. You have combined a long and fruitful career on the land with another of equal significance in the broad field of public service in your community.

As a competent leader and able spokesman for your neighbors and fellow farmers, you have enriched the agricultural heritage of your native Essex County and State. You have assumed many responsibilities in your community, first as councilman, and subsequently as an elder of your church, treasurer of the local library association and a member of the zoning board.

For nearly a half century you have served with distinction as a member and officer of your County Board of Agriculture which you helped to organize in 1918. For nearly 50 years you have been an ardent and loyal advocate of the Cooperative Extension Service, including the 4-H Club program.

Successful in the conduct of your own farm enterprise, you have never failed to respond to every call for counsel and cooperation in local agricultural activities concerned with dairying and soil conservation. Since 1950, you have been a director of the New Jersey Farm Bureau.

In gratitude for your many generous contributions to the welfare of others, the members of the State Board of Agriculture commend you and award to you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE, with best wishes for good health during your retirement.

Citation of Harry Deverman

The high rank attained by those engaged in ornamental horticulture in New Jersey is a source of pride to these delegates who represent all branches of our agriculture. To your rare talents is credited much of that achievement. We desire to pay tribute to your concept of service to your fellow nurserymen as well as your dedication to the advancement of the nursery interests of our State.

Through you we have shared in the rich heritage of your native Holland. Through your worthy endeavors, we know you best for your zeal and unselfish devotion to the betterment of your industry. By every criterion you have demonstrated a high degree of leadership that has inspired countless others.

As a founder and officer of the North Jersey Metropolitan Association of Nurserymen, you long will be remembered by its members for your tireless efforts in their behalf. Ever self-effacing, you have sought always to serve their needs and to promote their welfare . . . with never a thought of your own gain.

The members of the State Board of Agriculture desire to congratulate you on your fruitful career and extend best wishes on the occasion of your well-earned retirement. It is with sincere gratitude that this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE is awarded to you.

Citation of Amos Kirby

As an able and accomplished journalist, you have rendered for more than a half century a most significant service to New Jersey agriculture. Actually, you were a pioneer . . . perhaps, the pioneer chronicler reporting New Jersey farm news regularly for the urban press.

Thanks to your diligence and industry, countless thousands of non-farm readers and listeners have today a fuller appreciation of agriculture and the role of the farmer. Both groups have gained a new concept of their inter-dependence and a mutual understanding of their common interests.

You are known as a "farmers' reporter" because of your rare ability to assemble the basic facts and to present them in such direct and simple style. In your fourteen years of radio broadcasts, you also cultivated a vast urban and suburban audience of loyal listeners who gained a new concept and understanding of the present-day farmer and modern agriculture.

Mindful of your early association with the Department of Agriculture, the Milk Control Board, the New Jersey Farm Bureau and the New Jersey State Grange, the members of the State Board of Agriculture congratulate you on your rare talents and your remarkable career. As an expression of our gratitude, the CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE is awarded to you at this 49th Annual Convention, with best wishes during your retirement.

Citation of Michael J. Klein

Nearly 50 years ago, you began your career as a florist and plant grower in your adopted State. Year after year, you have found time to contribute to the advancement and remarkable growth of commercial horticulture in New Jersey.

As an active member and able officer of your own commodity organizations, you repeatedly have made manifest your interest in the welfare of your fellow growers. Consequently, you have been honored frequently with high office in which you have demonstrated rare capacity for leadership.

You have served with distinction as a member and president of both the Passaic County Board of Agriculture and the State Board of Agriculture, and as an officer of the New Jersey Agricultural Society.

You are to be congratulated on your continued and active interest in farm affairs and your generosity in sharing with your friends and

neighbors many days of your current retirement, particularly since your more recent location in Warren County. There you have dedicated your time and efforts to the betterment of the rural life of that area.

The members of the State Board of Agriculture, grateful for your contributions to the welfare of our agriculture and mindful of your recent term as a member of the Board, award to you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

REPORT OF THE COMMITTEE ON RESOLUTIONS

The following resolutions, presented by William Filemyr and reported favorably by the committee, were adopted by the State Agricultural Convention:

WHEREAS, the Honorable Richard J. Hughes, Governor of New Jersey, has constantly demonstrated his sincere interest in the welfare and progress of New Jersey agriculture as a substantial segment of the State's total economy;

WHEREAS, he supported us in our need to gain relief from unrealistic farm land assessments that would impoverish the farming industry, by favoring an amendment to the State Constitution, if necessary, as a remedial step;

WHEREAS, his appointed committee was of great assistance to the farm and business leadership which united to solicit a majority vote in favor of Question No. 6 on the November ballot;

THEREFORE BE IT RESOLVED, that we, the delegates attending the Agricultural Convention of January 30, 1964, express our deep gratitude to Governor Hughes for his encouragement and support by adopting this resolution and forwarding a copy of it to him.

WHEREAS, the Save Open Space Campaign last year, culminating in the adoption of Referendum Question No. 6 on the November ballot by a margin of well over two-to-one, was the combined effort of a great number of farm and business leaders interested in preserving the agriculture of New Jersey from continued disappearance;

THEREFORE BE IT RESOLVED, that this Agricultural Convention of 1964, do on this date of January 30th, officially express its gratitude to the hundreds of persons who, on county committees or in one way or another, contributed to the success of this endeavor; and

BE IT FURTHER RESOLVED, that special thanks go to Kenneth Klipstein as general chairman of the Citizens Committee to Save Open Space; to Wheeler Mc Millen as chairman of the Coordinating Committee; to Francis A. Raymaley as the dynamic executive director; to Edwin A.

Gauntt as the treasurer and fund solicitor; to the College of Agriculture; to the New Jersey Farm Bureau and the New Jersey State Grange; and to the American Cyanamid Company and the Cooperative G.L.F., Inc. for assigning top level executives to this enterprise; and

BE IT FURTHER RESOLVED, that copies of this expression be sent to the individuals and organizations named herein.

WHEREAS, this agricultural convention was established in 1916 by law, wherein the then existing farm organizations were named to have official delegates to meet and choose annually two members to the State Board of Agriculture and to transact such other business as may properly come before it; and

WHEREAS, this law has been amended eight times to provide for adding new organizations or deleting defunct ones, the last such amendment having been twelve years ago; and

WHEREAS, there are presently a number of State-wide agricultural, breed and commodity organizations which are important in their respective fields in today's agriculture and which have no voice in our present convention;

THEREFORE BE IT RESOLVED, that this convention recommend a modernization of the 1916 law, and urge the State Board of Agriculture to study the matter through conferences with organizations and groups as discussed at the meeting of delegates yesterday, and make recommendations at the Agricultural Convention of 1965.

WHEREAS, the laws of New Jersey governing the marketing of eggs have become obsolete due to the changes in egg marketing practices which have developed during recent years; and

WHEREAS, the poultry industry of this State, being cognizant of this situation, seeks legislation to enact a law suitable for governing the marketing of eggs now and in the future; and

WHEREAS, such legislation was introduced and did pass in the Assembly and received second reading in the Senate in the 1963 legislative session before it adjourned;

THEREFORE BE IT RESOLVED, that this body urge the introduction of legislation similar to that acted upon in the 1963 legislative session to establish an egg marketing act; and

BE IT FURTHER RESOLVED, that copies of this resolution be sent to the Governor and to each legislator.

WHEREAS, the dairy industry is an important segment of our agricultural economy and has been subject to regulation for several decades, more recently by the Office of Milk Industry, which to a limited extent is a unit of the Department of Agriculture; and

WHEREAS, there has been reintroduced into the 1964 Legislature a bill (Assembly No. 81) to create a division of dairy industry in the Department of Agriculture, the director of which shall be appointed by the State Board of Agriculture and the Secretary, under civil service regulations, and responsible to the Secretary of Agriculture for administration of the division; and

WHEREAS, this proposed bill creates a dairy advisory committee within the division of dairy industry, its members to be chosen by the State Board and the Secretary from nominations submitted by producers, handlers and processors, and the general public;

THEREFORE BE IT RESOLVED, that this convention of delegates, meeting in Trenton, New Jersey, on January 30, 1964, support the proposed legislation as a specific means of improving the dairy situation and in administering regulations governing the industry through such services as the Department may provide; and

BE IT FURTHER RESOLVED, that copies of this resolution be sent to each member of the Senate and General Assembly of New Jersey.

WHEREAS, advisors to the Secretary of Agriculture have recommended that, although the State's resale milk price control program should be reorganized to permit greater freedom of competition, they have warned against moving too far, too fast in the indicated direction, and have proposed a transitional program for an indeterminate period; and

WHEREAS, the marketing of New Jersey milk remains in a state of uncertainty and economic turmoil because of new competitive influences introduced by innovations in distribution; and

WHEREAS, there is danger that the rate of attrition among milk distributors who have long provided markets for New Jersey-produced milk be unduly accelerated by any precipitate action by the State to relinquish restraints over resale prices and predatory competitive practices; and

WHEREAS, the marketing position of New Jersey dairymen must be maintained as securely as possible if the State's total agricultural economy is to be preserved in the interests of all citizens, consumers, businessmen and farmers alike; and

WHEREAS, the majority of the farm families represented by delegates to this Agricultural Convention are consumers of milk, and not producers, a fact which should give us equal standing to be heard as consumers on the question of public policy in this matter; and

WHEREAS, the State Department of Agriculture now has the basic economic data upon which can be established a beneficent program of milk regulation which will give their proper equities to consumers, farmers and businessmen through a system of careful costing and prudent pricing; now, therefore,

BE IT RESOLVED, that this Forty-Ninth New Jersey Agricultural Convention urges State Government in all its branches to consider well the potential consequences of rapid and drastic changes in the immediate regulatory policy, and we further urge that no commitment be made at this time to a long term policy until the transitional program has been thoroughly tested as to its beneficence and merit to all of our citizens.

WHEREAS, the New Jersey Department of Agriculture in conjunction with the United States Department of Agriculture will enter into an eradication program for the control of hog cholera in the very near future; and

WHEREAS, the control of the movements of swine is a necessary part in the eradication program; and

WHEREAS, dealers in swine are not licensed or required to keep records of movements of swine;

NOW THEREFORE BE IT RESOLVED, that Article 1, Chapter 11, Title 4, of the Revised Statutes of New Jersey (An Act Providing for the Licensing of Cattle Dealers, Brokers and Agents) be amended to include all dealers of swine; and

BE IT FURTHER RESOLVED, that the State of New Jersey furnish a stitched ledger for the recording of all transactions of cattle and swine so that a permanent record may be kept and available for examination upon request by the proper State authorities; and

BE IT FURTHER RESOLVED, that the license fee be increased from ten dollars ($10.00) to fifteen dollars ($15.00) for each applicant.

WHEREAS, the use of pesticides is absolutely essential for the production of food, for the protection of the public health, for the protection of our natural resources and for the maintenance and furtherance of a sound national economy; and

WHEREAS, this fact is in danger of being buried in public misunderstanding by deliberate campaigns calling attention to rare accidents and occupational hazards, but not to the many benefits derived from proper use of these important chemicals;

THEREFORE BE IT RESOLVED, that this Agricultural Convention expresses its confidence in the leadership provided by the State Department of Agriculture and by the various governmental agencies in the development and execution of effective and safe pest control programs; and

BE IT FURTHER RESOLVED, that users of such materials be encouraged to continue to cooperate with regulatory agencies to the end that maximum benefits might accrue, with safe and proper handling of pesticides.

WHEREAS, the New Jersey Cranberry Industry is located in the same southeastern areas of the State as the vast Wharton Tract and other State-owned recreational areas; and

WHEREAS, the water and lands owned by cranberry growers are used by sportsmen to some extent as are these State Parks. As cranberry culture requires the same vast areas of land for watershed reservoir and flood control as do fishing and boating; and

WHEREAS, those State officials responsible for the implementation of the "Green Acres" progress have tended to show a keen interest in acquiring for their program many of the important cranberry tracts, and because of their right of condemnation, this policy is creating a major threat to the future of the New Jersey Cranberry Industry;

THEREFORE BE IT RESOLVED, that those responsible for the operation of Green Acres be required to refrain from using their powers of condemnation in their efforts to acquire the water and lands now being used for the growing of cranberries. And that the officials of the New Jersey Department of Conservation consider the advisability of allowing cranberry growers to obtain long-term leases of land and water now held in State ownership.

WHEREAS, New Jersey's farmland and rural areas are faced with the pressures of more people and more industry moving into the rural areas; and

WHEREAS, there seems to be a lack of understanding and acceptance among our people of the purpose and value of planning for progress under these conditions;

THEREFORE BE IT RESOLVED, that the Rural Advisory Council of the Department of Agriculture and other State agencies be congratulated on their work so far in community adjustment and planning, and that a stepped-up program on the values of planning be engaged in that would include regular newspaper and radio releases based on research in planning that could be released by local planning boards, the Extension Service and other agencies that local people have faith in to give them a purpose in planning and progress during this period.

WHEREAS, the lands along our coastline and those along the Delaware Bay and the Delaware River and its tributaries have for many years been considered by deed under the ownership of private citizens and taxed by local municipalities in the same manner as other lands within a taxing district; and

WHEREAS, in recent years the State, through its Riparian Law, has arbitrarily exercised claim to these said lands; and

WHEREAS, since there is some question relative to this ownership, the Riparian Lands Commission is attempting to gain sole jurisdiction over the subject;

THEREFORE BE IT RESOLVED, that a committee be appointed by the State Board of Agriculture of the State of New Jersey, to work toward, and to cooperate with other interested parties throughout this State for a solution to this problem.

WHEREAS, since this convention of delegates last met in January, 1963, the Great Creator has called from our midst to their final rest a number of our longtime friends, farm leaders and co-workers, among whom are Charles H. Brewer, a grower and seedsman who was a delegate from Union County to this convention for a span of half a century; J. Edward Chamberlin, a member of the State Board of Agriculture from 1949 to 1953, and an able representative of the agriculture of his home county of Middlesex; Harry Deverman, a long-time prominent nurseryman and propagator of roses, who was to have received a citation here today for distinguished service to New Jersey agriculture; Herbert Francisco, of Essex County, also a member of the State Board of Agriculture from 1940 to 1944 and representing the dairy industry; Dr. Frank G. Helyar, an illustrious and loyal member of the faculty of Rutgers University for many years and beloved counsellor to students; D. Howard Moreau, a great rural editor whose high principles and able pen made the Hunterdon County Democrat a respected weekly; Harold B. Scammell, one of the pioneers in New Jersey's imposing blueberry industry and a member of the State Board of Agriculture, representing Ocean County, from 1931 to 1935; J. Gilbert Sholin, a devoted member of the Department of Agriculture staff for 35 years, more recently as supervisor of administrative services; and Vinton N. Thompson, also of the Department staff, first as director of the Rural Advisory Council, and then for years the director of the Division of Markets; and

WHEREAS, the passing of these men of high rank in their respective fields of service to agriculture is a grievous loss to their many friends in this convention and throughout the State;

THEREFORE BE IT RESOLVED, that it is fitting for us, the delegates at this 49th annual agricultural convention, on January 30, 1964, to pause in our deliberations for a moment of silence in respect and loving memory of our departed friends; and

BE IT FURTHER RESOLVED, that this action be made a matter of record of these proceedings and that copies be sent to the respective families.